## 1. EXECUTIVE SUMMARY.

This document represents the Coast Guard Information Technology (IT) Five Year Plan. It outlines strategic information management initiatives for the next five years to help achieve the Coast Guard business goals identified in the Commandant's Executive Business Plan. These goals, in turn, support the departmental goals set by the Office of the Secretary (OST) in the DOT FY97 Strategic Plan. The development of a Coast Guard-wide Five Year IT Plan also allows the Coast Guard to be in closer alignment with the directions of the Office of Management and Budget (OMB), the General Accounting Office (GAO) and Congress.

The Plan contains:

- a mission statement defining the areas that IT supports in the Coast Guard
- an IT vision describing the desired future state of IT
- principles for implementing the vision
- major IT accomplishments
- present and proposed IT environments
- corporate IT architecture
- Coast Guard Information Technology initiatives

The Plan is a continuous refinement of previous efforts by the Coast Guard IRM (Information Resource Management) Board, Coast Guard IRM Peer Group and planning representatives from each Program. It builds upon prior strategic IT planning efforts which include the IT Concept of Operations (CONOP), individual Office Strategic IRM Plans (SIRMPs) and the Jumbo SIRMP Business Model. It also builds upon an assessment of the Coast Guard's strategic information management practices. Using a self-assessment toolkit developed by GAO, an analysis was made of the Coast Guard's performance in relationship to "Best Practices" identified by GAO in their study, "Executive Guide: Improving Mission Performance through Strategic Information Management and Technology." The goals in this Strategic IT Plan address areas of greatest potential return in the Coast Guard's strategic IT practices.

Accomplishment of these strategic IT goals moves the Coast Guard closer to the desired states as described in each of the goals. The desired states are modeled after the IT "Best Practices" defined by the GAO, and will help the Coast Guard minimize organizational stovepipes and enhance an organization-wide approach for using IT to support the Coast Guard's mission. This result will enable the Coast Guard to operate more effectively with increasingly scarce resources.

## 2. MISSION.

The Coast Guard is the primary federal agency with maritime authority for the United States. Coast Guard personnel respond to tasks in seven unique mission or program areas. Our small size dictates our decentralized, multi-mission approach. We respond to the needs of the public in the maritime arena. Our missions and programs are:

**Search and Rescue**. Minimize loss of life, personal injury, and property damage on the high seas and the United States waters.

**Marine Environmental Protection**. Minimize damage caused by pollutants released in the coastal zone. Overcome or reduce threats to the marine environment posed by potential spills of oil or hazardous substances. Assist in national and international pollution response planning.

**Enforcement of Laws And Treaties**. Enforce federal laws on the high seas and in U. S. waters. Interdict drug smugglers and illegal migrants. Enforce applicable laws and regulations within the Exclusive Economic Zone (EEZ). Inspect domestic and foreign fishing vessels to ensure compliance with federal laws. Help other agencies enforce our nation's laws.

**Ice Operations**. Provide icebreaking capability to support our national interests in polar regions. Facilitate United States maritime transportation through ice-laden domestic waters. Conduct the International Ice Patrol to observe and chart the positions and movement of icebergs.

**Aids to Navigation**. Develop, establish, maintain and operate aids to navigation to help navigators determine their position or safe course and warn of obstructions in or adjacent to navigable waters. Establish, operate and maintain electronic aids throughout the United States and in other areas of the world to provide continuous, accurate, all-weather positioning capability for military and civilian mariners and aviators.

**Marine Safety**. Minimize deaths, injuries, property loss and environmental damage by developing and enforcing federal standards for vessels, offshore facilities, merchant marine personnel and other facilities engaged in commercial or scientific activity in the marine environment. Reduce the number of deaths, injuries and property damage involving recreational boats.

**Defense Operations**. Maintain constant Coast Guard military capability and readiness. Safeguard the nations ports, waterways, waterfront facilities, vessels, personnel and property from accidental or intentional damage, disruption, destruction or injury during times of conflict.

## *IT Vision*

***The Coast Guard as the world's premier maritime service delivers the right information to the right people at the right time to support all CG missions.***

The underpinnings of the IT Vision are the guiding principles which define and give direction to Coast Guard IT processes and desired outcomes. These principles are provided below.

## *IT Principles*

1. ***Information is a vital Coast Guard resource and will receive management attention on par with people, facilities, and capital.***

2. ***Information technology exists to support customer needs to perform Coast Guard missions.***

3. ***IRM activities will focus on improving customer business processes and services, as well as reducing the burden on end-users.***

4. ***Coast Guard IT systems will be designed to be cross-programmatic, cross-functional and user friendly.***

5. ***The Coast Guard will adhere to standards in the acquisition, design and development of IT systems.***

6. ***Information Systems will use best available mix of off-the-shelf and custom developed products to optimize benefit to cost ratio over the life cycle.***

Our IT Vision and Principles ensure that our IT efforts are in support of Goal #8 of the Commandant's Executive Business Plan which states that Coast Guard will:

***"Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance."***

## 3. MAJOR ACCOMPLISHMENTS.

### Coast Guard Standard Workstation III (SWIII) Migration

During FY97 Coast Guard completed the first phase of the upgrade of the Coast Guard's microcomputer infrastructure including replacement of desktop workstations and servers, upgrading of local area networks, and expansion of the wide-area network at Coast Guard Headquarters, both Area offices, all District offices, both Maintenance and Logistics Commands (MLCs), the Finance Center (FINCEN), the Operations Systems Center (OSC) and most Electronic Support Units (ESUs).

### Migration from Coast Guard Data Network (CGDN) to Coast Guard Data Network Plus (CGDN+)

The Coast Guard began migrating from the CGDN X.25 Data network to a commercial standards based network CGDN+. The CGDN+ network provides much greater network capacity and flexibility. The CGDN+ network migration is being coordinated with the migration from the Coast Guard Standard Work Station II (CGSWII) to the Coast Guard Standard Workstation (SWIII). During FY97 major units including Areas, Maintenance & Logistics Commands, FINCEN, OSC, Districts and ESUs were migrated to the new workstation and network simultaneously.

### Telecommunications Strategic Planning

A draft Telecommunications Plan for the Coast Guard was completed in FY97. This effort started by developing a baseline of the 1996 Coast Guard telecommunications systems including data, radio and satellite systems. Next, future requirements were developed based on gaps identified in the Command, Control, Communications, Sensors & Reconnaissance Baseline study. These requirements were refined and prioritized through interviews with program managers and extensive coordination across mission areas. Technology assessments of data communications, mobile communications and interoperability were conducted. Alternative telecommunications system mixes were modeled and assessed. A phased migration plan to the selected end-state telecommunications system, high level strategic planning, cost models and timelines were developed. Follow on efforts in the areas of integrating the CGDN and CGDN+ networks, user billing technology, and validating bandwidth estimates for major applications are in progress.

### $C^4I$ Baseline and Objective Architecture &Transition Plan (OA&TP)

Both the Baseline study and the follow-on Objective Architecture & Transition Plan were completed in FY97. Collectively they established a baseline of the "as-is" environment of $C^4I$ in the Coast Guard; and a comprehensive model for the planning, programming, budgeting, development/acquisition, deployment and maintenance of the $C^4I$ architecture in the "to-be" environment.

## Coast Guard Internet and Intranet Deployment

Coast Guard established an Internet and Intranet presence during FY97 signifying a major technological advancement for providing information and services to Coast Guard external and internal customers. The Internet site, currently hosted on the DOT Web Server, will migrate to a Coast Guard Web Server at Operations Systems Center in Martinsburg, WV early in FY98. The Intranet site(s) will continue to expand and become even more robust as new business opportunities and technological advances surface and are incorporated.

## "CIO 100" Designation

Coast Guard was honored by ***CIO*** (Chief Information Officer) magazine as one of the top 100 IT organizations within Private Industry and Federal, State and Local government.

## Directives on CD-ROM

In FY97, the Coast Guard Directives System (CGDS) became a fully cross-platform system, running on both CTOS (via OFIS Search) and MS Windows (via Innerview). In addition, over 13,000 images were added to the system for Windows users, as well as the Standard Distribution List and the Directives, Publications and Reports Index. For the first time since it's inception, the CD was distributed to every Coast Guard unit, as well as provided to other government agencies, reservists and private citizens. To further reduce production costs of G-SII (Office of Information Management) programs, the complete electronic forms library and the Coast Guard Correspondence System templates were also added to the CD-ROM.

## Data Inventory & Standardization Project

Coast Guard has completed a three-year long contractual effort to inventory data from all Coast Guard major legacy applications in order to identify common (or cross-functional) data across one or more applications and then to standardize the attributes of the data so identified. All Mission Essential and other major Coast Guard applications' data have been put through this process (over 35 applications).

## Year 2000 Project - Management Plan

The Year 2000 (Y2K) century date change issue affects a wide variety of information technology systems, computer applications, and equipment. The Coast Guard has taken the Y2K issue as a serious threat to halting or impeding the execution of its missions. During FY97, the Headquarters Y2K Program Office, G-SIA, accomplished several important steps which will help Coast Guard Program Managers and owners of affected software applications and equipment prevent Y2K-related problems. Hosting a major Y2K awareness seminar for all Headquarters Program Managers, and representatives from each major field command was the first major accomplishment. This seminar introduced the problem and its scope, and gave preliminary guidance in addressing Y2K issues within

the Service. Following the awareness seminar, G-SIA (Office of Architecture and Planning) asked all Headquarters Program Managers and major field commands to submit a list of all systems, software applications (including commercial off-the-shelf packages and applications obtained from other government agencies), and equipment that they had that was or might be Y2K-impacted. Armed with this data,
G-SIA built the Coast Guard Y2K database as another major accomplishment. This database contains the majority of Coast Guard Y2K information and allows G-SIA to answer data calls without having to ask for additional input from Program Managers or field commands. The third major accomplishment relating to Y2K was the development and distribution of the Coast Guard's Y2K Management Plan. This Plan provides the strategic guidance and policy for all Coast Guard units in dealing with the Y2K issue. The Plan includes timelines for assessing, fixing, testing, and implementing Y2K-impacted systems and electronics; provides the overall funding strategy; outlines date standards; and reporting requirements.

## 4. PRESENT ENVIRONMENT.

## 4A. STRENGTHS AND WEAKNESSES.

### Data Management

Coast Guard has had a formal data management program in place with the publication of Coast Guard Commandant Instruction 5230.32 in April, 1991. This policy set forth and enforces the data element standardization process for all corporate, or cross-functional data the Coast Guard uses in its information systems. Managers of all new and revised development efforts must comply by registering for standardization any data elements in their new system/application that are considered to be cross-functional.

Coast Guard has completed a three-year long contractual effort to inventory data from all Coast Guard major legacy applications in order to identify common (or cross-functional) data across one or more applications and then to standardize the attributes of the data so identified. All Mission Essential and other major Coast Guard applications' data have been put through this process (over 35 applications).

Coast Guard now estimates it has about 90% of its cross-functional data identified and standardized for use throughout the organization.

Since April, 1991 Coast Guard has had a relational database management system in place to capture and administer the standardized data attributes developed for Coast Guard use. This system, called Data Administration Dictionary System (DADS), now resides in the current Coast Guard standard workstation environment and holds all the standard data elements and their attributes developed from new information system development efforts and from the data inventory project.

However, the current ability of DADS to enforce data standardization is inadequate for Coast Guard needs. The system does not meet all Coast Guard requirements and it cannot be customized/modified. In addition, it cannot be put on the shared server in the standard client-server workstation environment and is therefore unavailable to our users. As such, only the data management program manager can access this data. We are studying the acquisition of a data management system that meets Coast Guard data management needs and is completely compatible with the Coast Guard client-server environment.

### Telecommunications

Telecommunications and network systems are essential for exercising command and control in all Coast Guard mission areas and in administratively supporting units whether ashore, afloat or in the air at locations around the world. The Coast Guard operates a wide variety of both fixed facilities and mobile platforms. As a multi-mission service, the Coast Guard is called upon to employ its finite resources in a wide variety of environments and operational situations. We require common, interoperable command and control, communications, computers, and IT capabilities across all platforms.

Voice

Radio systems provide secure and protected command, control and communication capabilities between fixed and deployed assets. Landline and telephone systems provide reliable, low cost communications. Satellite systems provide global connectivity, communications and interoperability between Coast Guard units, the maritime public and the Department of Defense (DOD).

The Coast Guard extensively uses VHF-FM marine band radios for command, control, communications, distress alerting and interoperability. The Global Maritime Distress and Safety System (GMDSS) is utilizing new digital technology to automate distress alerting, including new VHF-FM radios. Commercial, recreational and Coast Guard users are installing equipment to meet the 1 February 1999 deadline mandated by the Safety of Life at Sea (SOLAS) treaty. Concurrently, U.S. federal agencies are mandated to migrate to narrower spectrum usage and improved protected communications technology is available. The existing handheld and panel mount VHF-FM radios used for operations are unable to meet these mandates, are beyond the planned life cycle and provide limited range when used in DES protected mode.

The National VHF-FM Distress System (NDS) is used for distress and safety communications and as the primary short-range, tactical command and control system. The current system consists of aging, non-standard equipment with limited capabilities and supportability. Due to the harsh Alaskan environment, a project to upgrade and renovate NDS VHF-FM sites is in progress.

The Communication System (COMMSYS) utilizes Medium Frequency (MF) radios for distress, marine weather and safety broadcasts, and other maritime safety purposes. COMMSYS High Frequency (HF) radios provide long-range distress and safety as well as command, control and administrative communications. Providing these command, control, communications and public safety services by radio has been manpower intensive. A multi-year project (COMMSYS 2000) is using communications technology to provide current levels of service with reduced, more efficient manning.

Communications Area Master Station, Atlantic (CAMSLANT) and Communications Area Master Station, Pacific (CAMSPAC) are equipped with military UHF DAMA SATCOM (Ultra High Frequency Demand Assigned Multiple Access Satellite Communications) and capable of interfacing mobile units to the public switched network for secure phone patches. This capability provides needed security and interoperability between mobile units and other agencies for joint missions such as drug interdiction.

The Coast Guard has limited access to the DOD's Defense Switched Network (DSN). Where available, this access enhances our interoperability. DSN access is limited to Area commanders and Coast Guard units that have requirements to conduct overseas operations.

Coast Guard units not served by consolidated GSA or commercial CENTREX telephone service use Coast Guard-owned Private Branch Exchanges (PBXs) or key telephone systems to connect to the local and FTS2000 long-distance telephone networks. Some larger units have voice mail capability. The present state PBX inventory is varied and

non-standard. This inventory is also considered at risk for Year 2000 (Y2K) compliance and future technology migration to new standards such as Asynchronous Transfer Mode (ATM) and Integrated Services Digital Network (ISDN).

Coast Guard access to Department of Defense military Ultra-High Frequency (UHF) satellite communications systems is governed by Joint Staff Memorandum of Policy (MOP) 37. UHF Military Satellite Communications (MILSATCOM) systems are installed on the largest classes of cutters: Polar Class icebreakers (WAGB), high endurance cutters (WHEC), and medium endurance cutters (WMEC) and Atlantic Area HC-130 aircraft. These systems provide critical information, particularly for joint and interdiction operations. Expanding MILSATCOM availability to other Coast Guard platforms is important to achieving success in law enforcement and national defense missions. Coast Guard platforms frequently operate independently, making this connectivity vital for such missions as drug and alien migrant interdiction as well as for interoperability with the Navy and DOD.

International Maritime Satellite - A (INMARSAT-A) provides command and control capability to the largest classes of cutters, the commandant's aircraft, and contingency forces. INMARSAT installations are Secure Telephone Unit-III (STU-III) capable, which permits high-quality, secure phone calls when HF propagation is unreliable. In addition, INMARSAT-A provides communications, distress, and safety connectivity to similarly equipped Safety of Life at Sea (SOLAS) vessels. INMARSAT-A usage fees are a significant limiting factor, and can cost between five to ten dollars per minute.

Data

The Coast Guard Data Network (CGDN) provides day-to-day, unclassified individual (e-mail) and organizational record communications. FY97 was a major transition year for this network. CGDN is an X.25 protocol compliant packet switching network comprised of leased circuits and Coast Guard owned switching equipment. As the commercial network de-facto standard has transitioned to the Transmission Control Protocol/Internet Protocol (TCP/IP) the CGDN has become less inter-operable. To address this problem and provide a more network centric architecture we began the roll out of a TCP/IP network coined the Coast Guard Data Network Plus (CGDN+). This TCP/IP architecture will ensure inter-operability with the National Infrastructure Initiative (NII), Defense Infrastructure Initiative (DII), TCP/IP networks and ensure that Commercial Off-The-Shelf (COTS) solutions can be more easily incorporated. During the transition to TCP/IP it is necessary to maintain the legacy X.25 CGDN network until Mission Essential Applications (MEAs) can be rewritten for this environment and to provide support for the installed base of legacy CGSWII computers.

Emergency Response Network Interface Equipment (ERNIE) provides mobile contingency X.25 and Data Encryption Standard (DES) protected remote access to the CGDN via dial-up access. In addition, Shipboard Network (SHIPNET) is providing cutters shipboard access to the CGDN while moored at their home pier. The Arctic Net, a satellite-based packet switched network, extends CGDN service to units located in Alaska.

A Simple Mail Transfer Protocol (SMTP) gateway connects the CGDN and Internet. Firewalls are in place to provide security for CGDN+ and connectivity to the Internet.

Radio systems provide low-speed data communication capabilities between shore units and mobile platforms (cutters and HC-130 aircraft). High Frequency Data Link (HFDL) provides classified and unclassified record traffic to small cutters. The current HFDL and Frequency Shift Key (FSK) modems are at the end of their expected service life and supportability, as well as not allowing interoperability with emerging Navy HF e-mail systems.

Department of Defense (DOD) UHF MILSATCOM provides Common User Digital Information Exchange System (CUDIXS) and Officer Tactical Communications Information Exchange System (OTCIXS) data communications for large cutters.

INMARSAT-C terminals provide facsimile and data service for 110 foot Island Class patrol boats, Polar Class icebreakers, high endurance cutters, and medium endurance cutters, the commandant's aircraft and contingency forces.

FTS2000 telephone service offers a wide range of data services, including packet switched, dedicated transmission, and switched data service.

Record

The Coast Guard Data Network (CGDN) and the Coast Guard Data Network Plus (CGDN+) are the primary networks for day-to-day, unclassified individual (e-mail) and organizational record communications. The DOD is planning to implement the Defense Message System (DMS) to integrate DOD organizational formal and informal message systems DOD wide. The Coast Guard is included and active in DOD planning for DMS in the Coast Guard.

The Automated Digital Network (AUTODIN) is a DOD system that provides worldwide, high-speed, secure record message communications. Coast Guard Communication Centers (COMMCENs) provide gateway access to AUTODIN for major Coast Guard units such as headquarters, areas, and districts. The capability to transmit and receive classified traffic is not available at all Coast Guard locations. AUTODIN is scheduled to end operations by CY1999 and will be replaced by DMS.

The Secure Data Network (SDN) provides secure record message capability from districts to groups, air stations, marine safety offices, and other units.

Teletype Exchange (TELEX) and Teletypewriter Exchange (TWX) are low-speed, commercial, dial-up teletype networks which provide interoperability capabilities among selected Coast Guard locations and state and local agencies, maritime and commercial shipping organizations. These services interface to the Coast Guard's automatic message processing system.

The Naval Modular Automated Communications System (NAVMACS) monitors and processes message traffic from the Navy's fleet satellite broadcast for Coast Guard cutters.

Electronic mail capability is provided through the proprietary OFIS Mail application for 20,000 plus Coast Guard Standard Workstation II users. Microsoft Exchange mail provides e-mail service for the Coast Guard's new standard workstation - SWIII - which uses Windows NT as its operating system. SMTP mail through 3 Internet gateways to X.400 protocol compliant and other non-proprietary mail systems provides connectivity to other government agencies and the private sector. The Windows NT system and Exchange software has been selected for development software for the DMS project by DOD.

Video

Many major Coast Guard facilities are equipped with closed circuit television (CCTV) equipment and video teleconferencing for training and briefing applications. These units include: Coast Guard Headquarters, Training Center Petaluma, CA, Electronics Logistics Center in Baltimore, MD, Air Station Kodiak, Alaska, Aircraft Repair and Supply Center in Elizabeth City, NC, Coast Guard Institute in Oklahoma City, OK, the Seventh Coast Guard district in Miami, FL and Reserve Training Center Yorktown, VA.

## Information Dissemination

Government Information Locator Service (GILS)

Coast Guard's Internet Working Group judiciously studied the requirements of the Government Information Locator Service, which was originally established to enable all users (both government and private sector) to search for Federal information on the Web. The determination was that in light of the fact that Coast Guard is moving its server to OSC Martinsburg, WV and that greatly enhanced search capabilities with metaheaders are available, the data fields outlined in the original GILS were outmoded. The Chair of Coast Guard's Internet Working Group met with program officials at DOT, who concurred.

Freedom of Information Act (FOIA)

Generally, the Freedom of Information Act provides for persons to request and receive copies of agency records. Records, or portions thereof, may be excluded or exempted from release if they meet certain criteria. The right to appeal and judicial review is available for those to whom records are denied. Policies and procedures for managing the FOIA program are contained in Commandant Instruction M5260.3 dated 14 Jun 1996. Training is provided to various program managers on FOIA. Also, new information is submitted to all field FOIA Coordinators using an established message system.
The newly-enacted amendments to the FOIA, known as the Electronic Freedom of Information Act (EFOIA), require that those records which were formerly available for public inspection in a reading room must now also be available for on-line inspection. Moreover, those records which are determined to be responsive to frequent written

requests must also be available for on-line inspection. Lastly, agencies will be required to provide records to requesters in the format of the requester's choice, if this format is reasonably available to the agency. As an adjunct, agency records created on or after 1 November 1996 must be available by electronic means within one year of that date.

Records are presently prepared for release to requesters using a laborious process of "blacking out" and "cutting and pasting" portions of documents that are exempt. This system is extremely tedious and must often be repeated several times during the lengthy review process. A considerable amount of valuable personnel time is lost to this obsolete manner of conducting business.

Coast Guard Directives System CD-ROM

The Coast Guard Directives CD-ROM consolidates Commandant Instructions, Manuals, and Notices in a single electronic repository, which is distributed to all Coast Guard units, as well as some reservists, auxiliary flotillas, contractors, other government agencies, and private citizens. The CD-ROM also contains the Directives, Publications, and Reports Index, and the Coast Guard Standard Distribution List. COMDTINST M5215.6b, The Coast Guard Directives System (CGDS), and COMDTINST 5605.5, Coast Guard CD-ROM Initiatives, provide background and guidance on implementation and usage of this system.

Additionally, the CGDS contains the complete Coast Guard automated forms library, comprising approximately 1000 Coast Guard-approved electronic forms, and the Coast Guard Correspondence System for Microsoft Word, which allows users to create memoranda and Coast Guard letterhead correspondence.

In addition to the inherent strengths (i.e., cost savings), this system has cross-platform accessibility (operates on both CGSWII and SWIII). It has improved the end users ability to search documents through the use of hyper-links. It provides improved portability over paper documents. It also allows Coast Guard-wide access to all Commandant Instructions and Manuals; in addition to providing wider audience access to public, private, and other government agencies. It has also allowed the Coast Guard to comply with National Information Infrastructure, National Performance Review, and Paperwork Reduction Act requirements. The weakness of the program lies mainly within the technical limitations of CGSWII, resulting in the lack of use by units still using this old system.

Coast Guard Printing

The Coast Guard Printing program is comprised of the processes of composition, platemaking, presswork, binding, and microform; the equipment used in such processes and the end items produced by such processes and equipment. COMDTINST M5600.6A states Policy and Procedures for managing the printing program for Coast Guard.

The main strength of the Printing program is the single point of contact for all printing matters. In addition, the use of printing and duplicating equipment at both the Transportation Administrative Service Center (TASC) and the Government Printing Office (GPO) allows for rapid turn-around of most printing and duplicating jobs. At the same time these two offices are a strength, they are also a weakness. The Joint Committee on Printing requires that all printing and certain duplicating jobs be offered to the Government Printing Office first. If the GPO determines that they can not meet the needs of the customer, the customer is then authorized a waiver to seek outside contractors. This has, in some cases, caused major delays in printing.

## Information Data Collection/Retention

Privacy Act

The Coast Guard maintains a proactive policy on the Privacy Act. COMDTINST M5260.3, Chapters 12-15 set forth policy and procedures for protecting the personal privacy of the individual. Its provisions govern the collection, maintenance, use and dissemination of personal information. It provides procedures for responding to requests from individuals who seek information on, access to, copies of, or amendments to records about themselves or others.

Coast Guard management of Privacy Act issues includes:

- Providing routine administrative functions and guidance required in connection with the Privacy Act.
- Training personnel on Privacy Act matters.
- Processing appeals of denials of requests for access to, or amendment of, records.
- Ensuring all systems notices for new or altered systems of records are published in the Federal Register prior to implementation.

In 1997, Privacy Act and Freedom of Information Act Program training was conducted for the Enlisted Assignment Officers at the Xerox University, Leesburg, VA.

Records Management

The Coast Guard maintains a proactive posture of issuing requisite policy, providing training, and meeting with IT officials to address issues of electronic records preservation. Presently the Coast Guard is in a transitional phase of migrating to new computer systems Coast Guard-wide; it will be several more years until migration is complete. Further, Coast Guard officials conduct extensive research to ascertain existing requirements regarding recordkeeping published by the National Archives and Records Administration (NARA). Currently, NARA too is in a transitional mode as they conduct tests on various types of new technology to determine the longevity and integrity of various types of archival media. As a result of the joint efforts of the Director of NARA's Center for Electronic Records and the Department of Defense (DOD) Electronic Records Task Force, universal federal standards are in review for final publication which will outline specific design criteria needed for Records Management Application software testing. Upon final approval of these standards, DOD will conduct extensive tests and publish a list of software meeting requirements for electronically labeling, filing, accessing and preserving these records. In support of a more specific tag identifier based on alpha-numeric codes, Coast Guard has drafted a new Records Disposition schedule which organizes and describes types of documents/databases using the Standard Subject Identification Codes (SSICs).

Public Use Reports

Under the Paperwork Reduction Act, Federal agencies are required to minimize and control burdens placed on the public. Collection of information activities by an agency and maintenance of records by the public should be necessary and useful. Public use reporting requirements apply to the collection from or requirement for maintenance of information by the public on identical items of information from ten or more respondents. Headquarters Instruction 5214.13A sets forth Coast Guard policies and procedures as established by the Paperwork Reduction Act

Policies that have been issued on Information Data Collection are:

a) Coast Guard Headquarters Instruction 5214.13A - "Public-Use Reporting Requirements and Procedures" - This Instruction sets forth Coast Guard policies and procedures for collection of information as established in the Paperwork Reduction Act of 1995, which includes initiating, reviewing, approving, identifying, and coordinating collections of information from the public.

b) Headquarters Notice 5214, Information Collection Budget (ICB), is an annual directive issued to program offices at Coast Guard Headquarters requesting their input for the Information Collection Budget for the remainder of the present and upcoming fiscal year.

Retention Period for Information Collection Reports: Seven years

Top five information collections: The below collection requirements are identified as candidates for potential reductions or consolidation:

a) Vessel Response Plans, Facility Response Plans, Shipboard Oil Pollution Emergency Plans, and Additional Requirements for Prince William Sound, Alaska - Burden Hours are 1,121,198.2.

b) Welding and Hot-Work Permit - Burden Hours are 2,190.

c) Letter of Intent - Burden Hours are 460.

d) Operations Manual and Amendments - Burden Hours are 22,632.

e) 33 CFR - Requirements for the installation and use of oil discharge monitoring equipment and tank vessels - Burden Hours are 782.75.

f) Alternate Compliance - Burden Hours are 120.

Forms Program

Approximately 95% of Coast Guard's **most frequently used** forms are automated. In addition to allowing for "on-line" access to forms, it has also eliminated the costs associated with handling forms. These costs include printing, mailing, and storage.

## IT Training/Policy Development and Deployment/System Evaluation

IT Training

Information Technology training focuses on the Coast Guard Standard Workstation. It is primarily oriented toward the users, systems administrators and the regional system managers. Training for the legacy Coast Guard Standard Workstation II systems is being phased out as training for the new Standard Workstation III systems is implemented. A combination of classroom and computer-based training is being utilized to introduce users to the new standard workstation. User training is usually coordinated by the staff of the Electronic Support Unit for their respective areas of responsibility. Training for non-standard systems is outsourced to other government and non-government providers. Training for applications such as the mission essential applications is provided by the Coast Guard program sponsors.

Policy Development and Deployment

The development of IT policy and guidance resides at the programmatic level. All cognizant organizations are responsible for promulgating and disseminating policy and guidance through a formal mechanism known as Commandant Instructions

(COMDTINST). The table that follows breaks down the areas of responsibility by Organization.

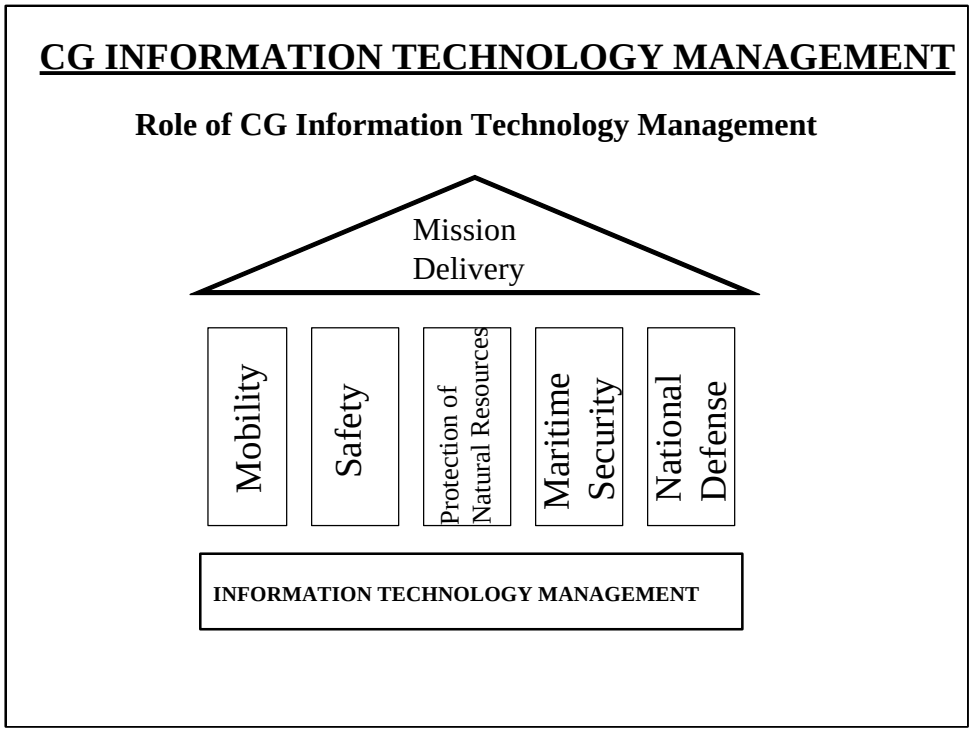
| Organization | Area of Responsibility |
|---|---|
| | |
| G-SIA | • IT Planning<br>• Internet Policy and Guidance<br>• Intranet Policy and Guidance<br>• Microcomputer Allowance List<br>• Non-Standard Workstation Waiver process<br>• Information Systems Technical Architecture (ISTA)<br>• Data Architecture<br>• Automated Information System (AIS) Proposal process<br>• Life Cycle Management (LCM) |
| | |
| G-SII | • Directives Program<br>• Freedom of Information Act (FOIA) Program<br>• AIS Security Program<br>• Privacy Act Program<br>• Forms Program<br>• Printing Program<br>• Postal Program<br>• Information Collection Program<br>• Records Program |
| | |
| G-SCC | • Standard Workstation III Technical Architecture<br>• Standard Workstation III Software Certification<br>• Hardware and Software Configuration Management<br>• Standard Workstation III Waiver Request process |
| | |
| G-SCE | • Electronics Policy and Guidance |
| | |
| G-SCT | • Telecommunications Policy and Guidance<br>• Telecommunications Technical Architecture |
| | |

System Evaluation

Coast Guard Information Technology (IT) system evaluation as required under the old GSA IRM Review Program is currently suspended pending revised policy and guidelines from the Office of Management and Budget.

## 4B. IT ARCHITECTURE.

### Information Technology Architecture (ITA)

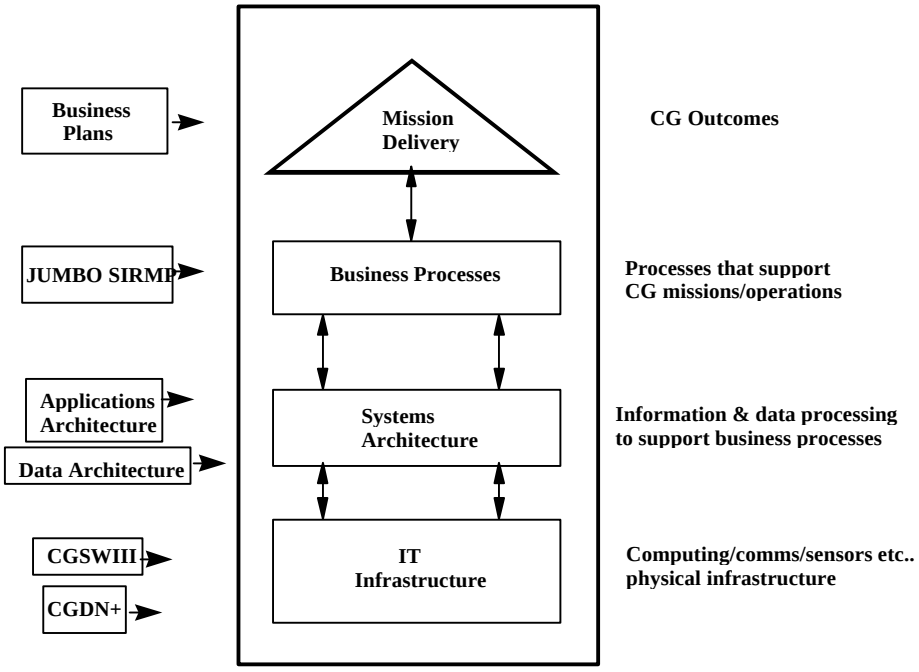



The Coast Guard is a multi-mission service, operating a wide variety of both mobile platforms and fixed facilities by land, sea, and air, world-wide. Coast Guard information technology management includes all information based systems - command and control, intelligence, communications, sensors, and administrative support. Therefore, common, interoperable capabilities across all information based systems is required.

The goal of information technology management is to provide the infrastructure and systems necessary to support all Coast Guard missions to ensure successful mission outcomes.

**a. IT Architecture Development**

## CG Information Technology Architecture Model




The information technology architecture model depicts managing information technology resources to support Coast Guard business processes, and ultimately mission delivery and outcomes to the public. It consists of four primary segments; Mission Delivery, Business Processes, Systems Architecture and the Information Technology Infrastructure.

Mission Delivery relates to Coast Guard customer-valued products and services. It is the outcome the Coast Guard delivers to the public. These are formally stated in the Commandant's Executive Business Plan and Directorate Business Plans.

The Business Processes segment defines the business processes required to produce customer-valued products and services. The Strategic Information Resources Management Planning (SIRMP) efforts defined 26 Coast Guard-wide business processes. Jumbo SIRMP integrated the individual office SIRMPs and is intended to provide a method to develop cross-functional systems to support these business processes in the most effective way possible.

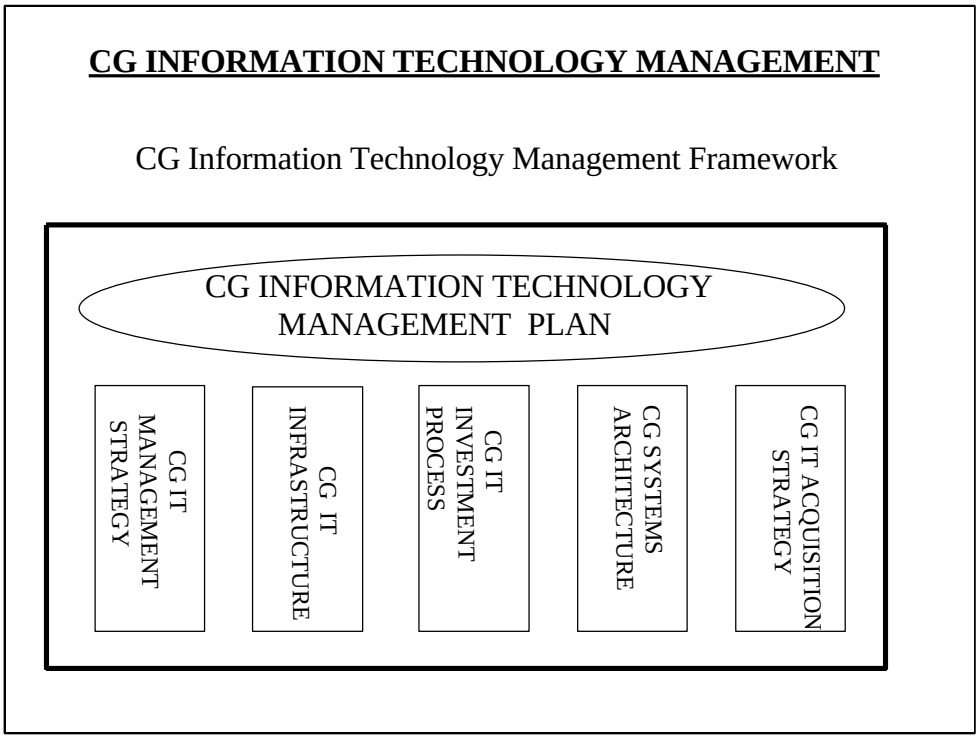
The Systems Architecture outlines the systems, applications and data that is necessary to support Coast Guard-wide business processes. It involves taking the key business processes identified in the SIRMPs and creating a logical set of systems and applications

to support those processes. The development of a Coast Guard Systems Plan will show our existing systems/applications and develop a plan to move toward Coast Guard-wide, cross-functional "to-be" systems/applications. The Systems Architecture also includes the Coast Guard Data Architecture.

The IT Infrastructure is a blueprint of the physical hardware, equipment, and related standards that are necessary to support the business processes that deliver our end-product to the customer.

The model allows us to trace specific business processes required to support specific missions, systems, applications and information required to support the business processes, and the physical infrastructure required to support these systems. It provides a top-to-bottom integrated view of how IT supports mission delivery across the Coast Guard.

**b. IT Architecture Components**




The Coast Guard Information Technology Management Framework consists of the Coast Guard Information Technology Management Plan with five major components. The Information Technology Management Plan is the overarching Coast Guard document that describes Coast Guard-wide IT Management. It includes the IT vision and guiding principles, the linkage of IT performance measures to Coast Guard strategic and business plans, and defines the roles and responsibilities for Coast Guard IT management.

The Information Technology Strategy describes where the Coast Guard is headed in relation to providing IT support to Coast Guard missions and operations. It contains specific IT strategies and IT initiatives that the Coast Guard needs to undertake in order to accomplish the IT vision, and these are linked directly to Coast Guard Headquarters Directorate business plans. The IT Strategy is currently in development by a Coast Guard senior level, cross-program workgroup.

The Coast Guard IT Infrastructure defines the physical infrastructure required to support the IT requirements of the Coast Guard. It integrates communications, computers, sensors, and electronics to portray a fully integrated Coast Guard-wide information infrastructure.

The Information Technology (IT) investment process ensures that all Coast Guard IT investments are managed to meet Coast Guard-wide information management

requirements. This process allows us to make informed IT decisions that support business processes and result in improved mission outcome. Defining this process, and more importantly institutionalizing it, is critical for our success in managing IT assets Coast Guard-wide, in addition to complying with the Clinger-Cohen Act and other federal legislation/mandates.

The Systems Architecture defines the common system and software application framework and data standards for developing integrated, cross-functional systems, and more importantly, data sharing. It lays out a system plan for selecting and developing integrated systems for Coast Guard-wide information support.

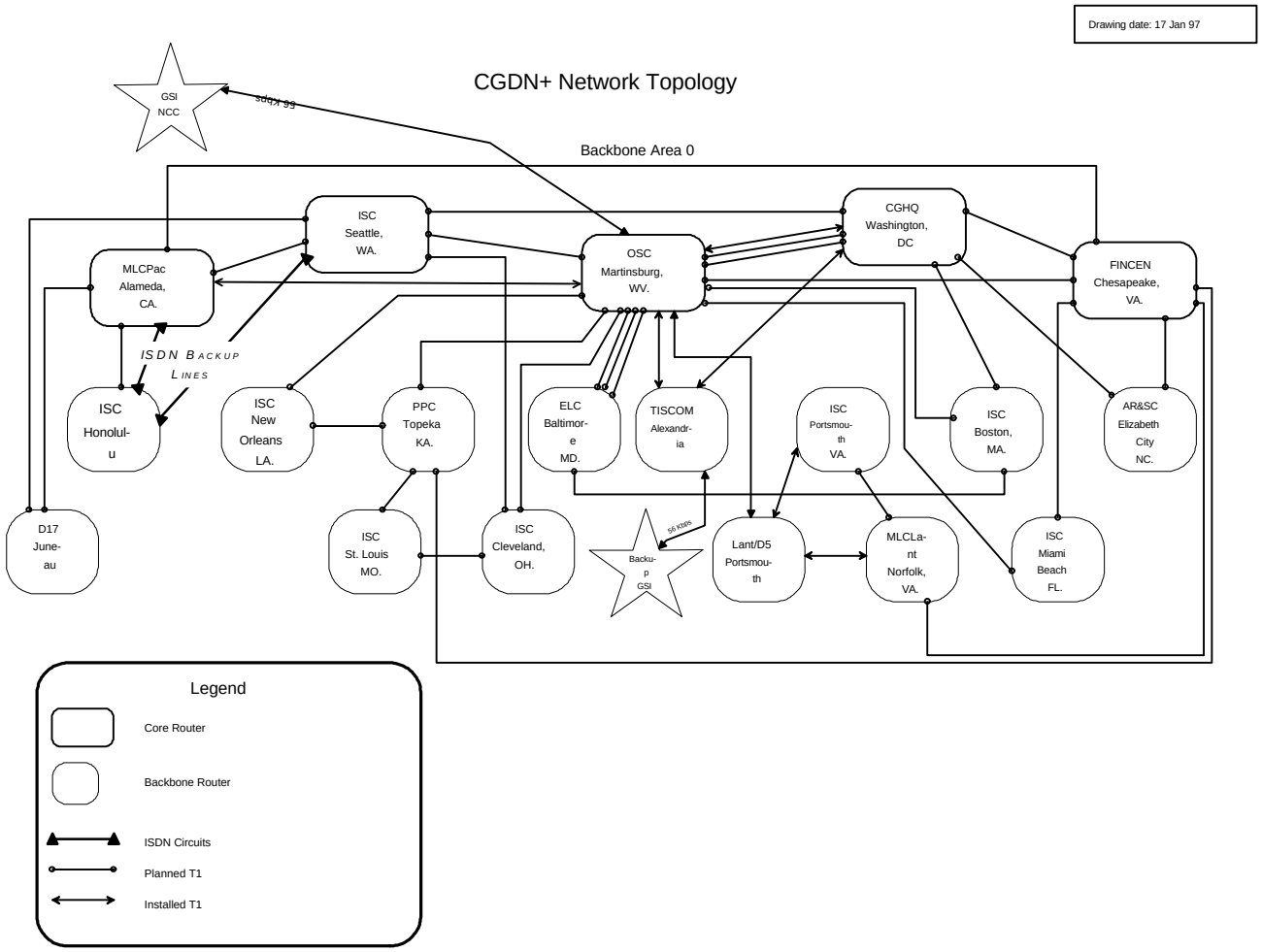
The IT Acquisition Strategy lays out the long term acquisition plan for meeting Coast Guard IT management needs. It is critical that the IT Acquisition Strategy be flexible and innovative to ensure long range information management needs of the Coast Guard can be met. Partnering with other federal agencies to streamline acquisitions and achieve economies of scale should be promoted.

All components of the IT Management framework are based on the premise that Coast Guard IT must provide support to all Coast Guard missions/operations.

## Network Architecture

Wide Area Network (WAN)

The network is TCP/IP based.




Local Area Network (LAN)

The Coast Guard Data Network (CGDN) provides day-to-day, unclassified individual (E-mail) and organizational record communications. CGDN is an X.25 protocol compliant packet switching network comprised of leased circuits and Coast Guard owned switching equipment. Major Coast Guard nodes are connected through 56 Kilobits/sec (KBPS) transmission circuits.

The Coast Guard Data Network LAN is TCP/IP on 10/100 Ethernet (IEEE 802). WAN connectivity is generally T1 PPP through a Router.

The Desktop Environment is Windows NT 3.51 and 4.0 workstation on Intel P5 or above processors. The servers are Windows NT 3.51 and 4.0 running on multiprocessor Intel equipment with SCSI disks. The current standard Office Automation Suite is Microsoft Office ’95. The Coast Guard has established an Enterprise License for the ORACLE RDBMS and related development tools and currently runs Mission Essential Applications in the PROGRESS RDBMS. The goal is to migrate all MEAs as well as applications under development to a common, SQL compliant, portable, scaleable, interoperable RDBMS environment.

The Coast Guard has adopted Microsoft Internet Explorer (MS-IE) as its standard Web-Browser. MS-IE supports the Secure Socket Layer (SSL) standard.

The Coast Guard Intranet is currently being built. The backbone has been completed. Small units will achieve connectivity to the Intranet via dial-up modems.

Microsoft Exchange has been adopted as the Coast Guard standard for e-mail software.

### *IT Investment Process*

The Coast Guard's current IRM RCP review and selection process is recognized by GSA, GAO, and OMB as a "best practice" in government IT management. However, as required the Clinger-Cohen Act, this process is being modified and expanded to annually review the entire Coast Guard-wide IT investment portfolio. A partnership with the Office of Plans, Policy and Evaluation (G-CPP) on Coast Guard GPRA implementation, and the Office of Finance and Procurement (G-CFP) on implementing the Chief Financial Officer (CFO) Act is required to integrate Coast Guard processes and performance measures to meet all legislative mandates.

The Information Technology (IT) investment process will ensure that all Coast Guard IT investments are managed to meet Coast Guard-wide information management requirements. In addition, this process will ensure IT investments satisfy requirements of the Coast Guard's strategic/business planning guidance and the Coast Guard's IT Strategy, is linked to the SPPBEES (Strategic Planning, Programming, Budgeting, Execution and Evaluation System), and feeds into the acquisition process.

Defining this process, and more importantly institutionalizing it, is critical for our success in managing IT assets Coast Guard-wide, in addition to complying with the Clinger-Cohen Act and other federal legislation/mandates. This process will allow us to make informed IT decisions, encompassing reviews of all types of IT funding (AC&I, OE, RDT&E), that support business processes and result in improved mission outcome.

Coast Guard strategic/business planning documents and the Coast Guard IT Strategy serve as the major guidance for IT requests input into this process. Mission driven IT requirements will be developed, prioritized and submitted by program offices to the CIO to meet their mission and business process needs.

### c. Architecture Resources

Various IT groups and boards are required for the CIO to effectively manage Coast Guard IT assets. These groups and boards work together and exchange information throughout the Coast Guard IT community to ensure effective Coast Guard-wide IT management. This structure is currently being reviewed in order to best manage Coast Guard IT resources. The expected components are:

- The IT Investment Review Board, Chaired by the CIO and comprised of senior management representatives from G-O (Operations), G-M (Marine Safety and Environmental protection), G-A (Acquisition), G-S (Systems), G-W (Human Resources), G-CCS (Chief of Staff), and G-CRC (Resources). The board reviews IT investment requests and annually develops the prioritized Coast Guard IT Investment portfolio. In addition, it is responsible for developing the Coast Guard IT strategy.

- The Coast Guard IT Management Board, Chaired by G-SIA (Systems Architecture and Planning) and comprised of G-SC (Command, Control, Communications and Computers), G-SCC (Computer Systems), G-SCT (Telecommunications), G-SCE (Electronics), G-SII (Information Management), and Office level representatives from G-O, G-M, G-A, G-W, and G-CCS. This group makes decisions effecting funding, implementation and changes effecting Coast Guard-wide IT issues. It reviews and approves all changes to the CG COE and Technical Architecture. Operations Systems Center (OSC), Telecommunications and Information Systems Command (TISCOM), and Command and Control Center ($C^2$Cen) representatives provide technical support, as well as the extended Coast Guard-wide IT community (Maintenance Logistics Commands and Electronic Support Units). Other organizational subject matter experts (SME) are included in the group as necessary.

- The SWIII Configuration Control Board (CCB), Chaired by G-SC and comprised of G-SCC, G-SIA, G-SCT, G-SCE, TISCOM, MLCs(technical advisors) and Ad Hoc members as necessary. This group reviews and approves changes to the SWIII infrastructure baseline and issues effecting the Central IRM Fund. Configuration issues exceeding their level of control are passed up to the Coast Guard IT Management Board.

- The SWIII Configuration Advisory Group (CAG) is the technical support group of the SWIII CCB. It is Chaired by the Computer Platform Division/Migration Implementation Team (CPD/MIT) and includes MIT(configuration management), MLCs(t) representatives for the Atlantic and Pacific Areas, and Ad Hoc members as necessary. This group provides technical review of change requests to the SWIII infrastructure. Configuration issues exceeding their level of control are passed up to the SWIII CCB.

- The Local SWIII CCB, Chaired by the Commanding Officer (CO) of the local support unit (Electronics Support Units and Major Headquarters Units). This group reviews

all local IT requests and acts on those within their authority or passes them up to the SWIII CAG or to Headquarters (G-SIA, G-SCC) as appropriate.

- Various other Application specific CCBs exist to review and approve application specific changes to the systems they were established to control. The Chairman of each CCB ensures that in approving application system changes they follow Coast Guard-wide strategy, architecture and standards. If changes will effect Coast Guard-wide infrastructure and changes to the CG COE, the request must be passed up to the Coast Guard IT Management Board for review and approval.

## d. IT Architecture/Standards

ISTA

The Coast Guard published it's Information Systems Technical Architecture (ISTA) in April of 1996. The ISTA contains the standards, guidance, principles, etc., which the Coast Guard uses as a framework to develop it's information systems.

The purpose of the ISTA is to:
a) provide guidance to commands implementing systems which use Information Technology (IT)
b) foster a common vision of the USCG Information Technology environment,
c) promote the implementation of "Open systems" which will ensure inter-operability, portability, and scalability.

The publication is a living document. An institutionalized process is being defined to maintain the ISTA.

CG COE

The Coast Guard is defining a Common Operating Environment (CG COE) and COE configuration management process, modeled after the Defense Information Infrastructure (DII) COE. The CG COE will be a methodology or "template" to promote data sharing between systems, software reuse and interoperability. The CG COE will be used by personnel involved in the acquisition, specification, development, upgrading, and fielding of Coast Guard information systems. It will provide the guidance and standards used in the design of all Coast Guard information systems. The CG COE and COE Management Plan is scheduled for publication in FY 1998.

Specifically, the CG COE concept encompasses:

- architecture and approach for building interoperable systems,
- ISTA compliant client/server architecture for precisely how system components will interact and a definition of the system-level interface to CG COE components,
- environment for sharing data between applications and systems,
- infrastructure for supporting Mission-Essential Applications (MEAs),
- definition of the runtime execution environment,
- reference implementation on which systems can be built,
- rigorous set of requirements for achieving CG COE compliance,
- automated toolset for enforcing CG COE principles and measuring compliance,

- process for software integration,
- approach and methodology for software and data reuse, and
- set of Application Program Interfaces (APIs) for accessing CG COE components.

Additionally, the CG COE will include a set of actual products (applications) that will conform to the standards, policy, principles, and guidance of the ISTA.

C$^4$I Baseline and Objective Architecture & Training Plan

Command and Control (C$^2$) is the decision process common to all Coast Guard missions.

The C$^2$ process is how we manage and direct our missions. The C$^4$I Baseline, (COMDTINST 3090.6), documented the lack of an integrated cross-mission Command, Control, Communications, Computers and Intelligence (C$^4$I) infrastructure to support a common C$^2$ process. The (draft) Objective Architecture and Transition Plan (OA&TP) further identified our C$^4$I system infrastructure deficiencies and prescribed a unified methodology of evaluating and employing technical solutions.

All systems on which C$^2$ decision makers depend are part of the C$^4$I system infrastructure, including *operational* (missions) and *support* (office, business, logistics, medical, etc.) applications. The OA&TP asserted that the existence of separate operational and support information technology infrastructures have significantly degraded Coast Guard *intra*-operability and *inter*-operability. The OA&TP further asserts that the Coast Guard cannot afford to support more than one information technology infrastructure.

### e. Architecture Linkages

Currently, Coast Guard uses DOT-mandated systems for accounting and bill-paying activities (DAFIS) and civilian personnel and payroll activities (CIVPMIS/CUPS). In addition, Coast Guard command and control relies heavily on the use of the Department of Defense's systems such as the Joint Maritime Command Information System (JMCIS), the Global Command and Control System (GCCS), the Anti-Drug Network (ADNET), and the Defense Satellite Communications System (DSCS). Coast Guard intelligence activities rely on many automated information and communications systems to collect, produce, and disseminate intelligence products. Examples include the Joint Deployable Intelligence Support System (JDISS), the Coast Guard Intelligence Support System (CGISS), the Secret Internet Protocol Network (SIPRNET), and Joint Maritime Information Element (JMIE).

## 4C. INFORMATION SYSTEMS SECURITY.

The Coast Guards Information Systems Security Program efforts in FY97 included the development of disaster recovery and contingency plans for major computer facilities through its Disaster Recovery/Contingency Planning Program. The Security Program also reviewed security plans, as well as: risk assessments; security tests and evaluations; contingency plans; and systems standard operating procedures for all Coast Guard Intelligence Support System (CGISS) local area networks (LANs) which connect to DOD's Secure Internet Protocol Routing Network (SIPRNET), in accordance with the requirements of the Departmental Information Resources Management Manual (DIRMM). The Security Program continues to provide end-user awareness and training as part of our migration to Coast Guard Standard Workstation III (SWIII)and, for the first time, all Coast Guard Flag Officers and Senior Executive Service personnel were briefed on Information System Security at the Coast Guard Flag Officer Conference.

Specific items are:

- See Sensitive Systems Inventory below. We have five general support systems.
- Twenty of our sensitive systems have security plans.
- One of the general support systems has a written contingency plan.
- Two of the sensitive systems have been certified.
- One has been partially accredited. (CGISS is made of several LANs Coast Guard-wide and all have not been accredited).
- Chapter 11 of the Departmental IRM Manual (DIRMM) does not require security plans for systems until they are under development. The National Distress System is a new budget request, but is not far enough in the development process to have begun development of a security plan. It is not reported in the Sensitive Systems Inventory but will be when the development has begun.
- The Coast Guard measures the activity on implementing information systems security through self-audit reports submitted from each major command to the Headquarters Information Systems Security staff.

**Inventory of Sensitive Systems**

| Acronym | Name |
|---|---|
| ACADIS * | U. S. Coast Guard Academy Information System |
| AMVER | Automated Mutual-Assistance Vessel Rescue System |
| CASP | Computer Assisted Search Planning |
| CDB II | Corporate Database II System |
| CEDS | Civil Engineering Data Systems |
| CGDN+ * | Coast Guard Data Network + |
| CGISS * | Coast Guard Intelligence Support System |
| CMplus | Configuration Management Unit Level System |
| FIRM | Finance Center Information Resources Management System |
| IBUDS/AFTS | Integrated Budget Development/Automated Funds Transfer System |
| LEIS II | Law Enforcement Information System II |
| LUFS/LUFS NT | Large Unit Financial System |
| MISLE | Marine Information For Safety and Law Enforcement |
| MMLD | Merchant Mariner Licensing and Documentation System |
| MSIS | Marine Safety Information System |
| NEMIS | NPFC Expert Management Information System |
| PDS | Personnel Data System |
| PMIS/JUMPS | Personnel Information Management System / Joint Uniformed Military Pay System |
| PMIS/JUMPS II | Personnel Information Management System / Joint Uniformed Military Pay |
| RADMIS | Research and Development Management Information System |
| SARMIS | Search and Rescue Management Information System |
| SCCS - 270 | Shipboard Command and Control System - 270 |
| SCCS - 378 | Shipboard Command & Control System - 378 |
| SWIII * | Standard Workstation III |
| TLC3 * | Travel Liquidation & Certification, Phase 3 |

*** - denotes general support system**

**4D. MAJOR IT SYSTEMS ($50 million or more in total life cycle costs).**

**INITIATIVE ID:** USCGO001

**TITLE OF PROGRAM/PROJECT:** Leased network services through the Defense Information Telecommunication Certification Office (DITCO)

**NEW PROJECT (50% OR MORE IS IT COST - PER CLINGER-COHEN ACT - YES OR NO_____):** No

**ONGOING PROJECT (50% OR MORE IS IT COST - YES OR NO_____):** Yes

**BUDGET ITEM NUMBER:** 69-0240-0-1-999

**FY-97 5-YEAR IT PLAN PAGE NUMBER:** Page 5.39

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**TYPE:** PII

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Eugene Vogt, (202) 267-1348

**DESCRIPTION:** DITCO contracts for, and bills the Coast Guard for virtually all dedicated telecommunications circuits used by the Coast Guard. The majority of DITCO circuits are used in support of the Coast Guard Data Network (CGDN), Coast Guard Data Network Plus (CGDN+), very-high frequency (VHF) radio control, and the anti-drug network (ADNET). This is primarily a utility account.

DITCO leased network services support a wide variety of operational and administrative functions of the Coast Guard. With a decentralized organization, leased network services are the most cost-effective for 24-hour, continuous use. These services are an essential component of the Coast Guard's telecommunications infrastructure and, ultimately, support all mission areas and business processes.

DITCO capitalizes upon the federal government's power to obtain the best prices for services. DITCO is able to engineer Coast Guard circuits with Department of Defense (DOD) and other federal agencies for cost-effective long distance routing. Finally, DITCO provides a consolidated bill for efficient administration by a small Coast Guard staff.

DITCO supports the infrastructure (leased circuits) of the CGDN, VHF radio control, and the ADNET. Without DITCO funding, the Coast Guard would lose an essential portion of its telecommunications infrastructure. The Coast Guard would lose 90% of its data

network (CGDN), 60% of its record message capability, control of remote VHF radios, and counter-narcotics C3I interoperability among CG/DOD/OGA command centers.

**SUMMARY OF SPENDING FOR PROGRAM/PROJECT STAGES (in millions):** Beyond FY01, 2% annual cost increase due to inflation is projected. Significant savings are projected from the closure of the CGDN in FY00 due to completion of migration to CGDN+ from CGDN.

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 4.900 | $ 8.000 | $ 10.000 | $ 9.700 | $ 9.000 | $ 9.000 | $ 9.000 | $ 9.000 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions): $** 68.600

**JUSTIFICATION AND OTHER INFORMATION:**

a) Justification and Other Information

Provides the telecommunications infrastructure for essential record and operational communications within the Coast Guard and to other agencies, such as DOD.

b) Program Management

Managed by TISCOM (OPS).

c) Contract Strategy

Maximize utilization of existing, multi-agency telecommunications contracts to leverage technology while minimizing costs and maximizing interagency standardization and interoperability.

d) OA/OST Goals Supported

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.
- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

e) DOT Goals Supported

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

f) Cost Schedule and Performance Goals

The DITCO contract provides installation services required in our migration from the X.25 CGDN to the IP CGDN+. Costs for aggregate bandwidth have dropped consistently over the past two years providing some relief in meeting our increasing need for additional bandwidth on the roll out of the CGDN+. The schedule for this network migration is closely linked to the roll out of the SWIII which requires this IP routing network protocol to operate, and in order to be interoperable with the NII and DII. The schedule is also linked to the recabling project that ensures a units LAN is upgraded to meet the additional network centric needs of the SWIII and its IP network infrastructure.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 3**:** Fully Functional System (current and ongoing). Migration of all units and mission essential applications to SWIII will result in the elimination of the X.25 CGDN network, resulting in lowered costs beginning in FY00.

**PROJECT STATUS:** System Maintenance - utility type account.

**MAJOR SYSTEMS REQUIREMENTS:**

(1) This project supports installation, maintenance, and leased line costs for the CGDN, CGDN+, as well as any required dedicated point to point telecommunication circuits. These circuits support the network infrastructure for CG intra-operability and inter-operability with external government agencies via the Defense Information Systems

Network (DISN), and the National Information Infrastructure (NII).

(2) DITCO supports network functions including as Type 1 bulk encryption by providing and installing cryptographic equipment on link encrypted circuits in support of the SECRET high network Secret Internet Protocol Router Network (SIPRNET). DITCO has many contract vehicles to support their mission of providing these services. No single private sector source could provide these services at less cost. Since DITCO provides these services for all DOD, DITCO can aggregate their circuit installation costs to obtain the best costs for these services.

(3) DITCO supports work processes that have been simplified or otherwise redesigned to reduce costs, improve effectiveness, and make maximum use of commercial, off-the-shelf technology. These processes are universally used by all DOD agencies to order these services and hence ensure processes are consistent across these Federal agencies.

**INITIATIVE ID:** USCGO002

**TITLE OF PROGRAM/PROJECT:** Fleet Logistics System (FLS)

**NEW PROJECT (50% OR MORE IS IT COST - PER CLINGER-COHEN ACT - YES OR NO_____):** No

**ONGOING PROJECT (50% OR MORE IS IT COST - YES OR NO_____):** Yes

**BUDGET ITEM NUMBER:** 69-0240-0-1-999

**FY-97 5-YEAR IT PLAN PAGE NUMBER:** Page 5.40

**ORGANIZATION/ENTITY:** USCG/G-SL

**TYPE:** PIM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR James Monaghan, (202) 267-0443

**DESCRIPTION:** The Coast Guard performs several broad missions, which include maintaining a system of aids to navigation, conducting defense operations, maritime law enforcement, marine inspection, port safety, search and rescue, marine science, ice operations, and environmental response. The primary mission of the Coast Guard logistics program is to provide logistics support to all Coast Guard units/assets involved in performing these missions. Logistics support encompasses all of the activities associated with developing, acquiring, testing, and sustaining all Coast Guard operating assets (shore, aviation, and vessel) to ensure safe and effective use throughout their service lives. Vessel logistics supports over 240 cutters (ranging from Polar Icebreakers to small inland buoy tenders) and over 1000 standard boats. The need for providing an integrated logistics system for supply and maintenance support of Coast Guard cutters and standard boats is called the Fleet Logistics System (FLS).

**SUMMARY OF SPENDING FOR PROGRAM/PROJECT STAGES (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 8.300 | $ 9.200 | $ 9.200 | $ 3.494 | $ 2.345 | $ 2.345 | $ 2.345 | $ 14.070 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 51.289

**JUSTIFICATION AND OTHER INFORMATION:**

a) Justification and Other Information

The current vessel logistics system is a large, fragmented, manually intensive system that encompasses all aspects of acquisition, supply, accounting, inventory control and maintenance for over 240 Coast Guard cutters and over 1000 standard boats. Vessel logistics includes maintenance, repair, modernization and equipment replacements (vessel logistics costs total over $500 million annually, including the associated parts inventories, shore-side infrastructure and dedicated personnel costs). Numerous non-integrated systems have been developed over time to provide supply, maintenance functions and accounting information. These fragmented systems prevent the Coast Guard from providing a centrally managed and coordinated supply and maintenance system that sustains all ships in a similar manner that ensures the most effective utilization throughout their service life. There is currently no architecture that links common supply and accounting functions used by Coast Guard ships, standard boats and support units. The lack of cross-program cost accounting data, historical data on which to base maintenance and repair forecasts, and management decision tools severely constrain the Coast Guard's ability to project future inventory and maintenance requirements. The Coast Guard extensively uses the DOD logistics system to satisfy our inventory needs. Failure to maintain compatibility will greatly increase the cost of Coast Guard operations.

The Fleet Logistics System (FLS) project will address long-standing U. S. Coast Guard vessel logistics problems which include: unresponsive supply support; inventory management shortcomings; lack of cost accounting, historical data and management information; lack of vessel configuration management; and lack of integration among USCG logistics organizations. FLS will reuse and update existing systems as much as feasible to manage the cost and risk of the project. Systems being reused include the Supply Center Computer Replacement (SCCR) and Aviation Computerized Maintenance System (ACMS). Reusing the system functionality from SCCR and ACMS will serve as the base line, or initial building blocks, for FLS.

FLS will provide the automated data and decision support tools to more efficiently and cost-effectively manage Coast Guard ships and standard boats. Proactive management based on historical usage rates, maintenance trends and accurate configuration data will reduce operational costs by allowing managers to reduce parts inventories at all levels in the organization. Accurate, timely data will provide the information required to validate maintenance philosophies including time between overhaul and replacement. The quality of contract specifications for repairs and maintenance will be improved with configuration management. This improvement will reduce costly shipyard contract modifications and delays.

Over the past several years, the Coast Guard has devoted a great deal of energy to developing a remedy for these logistics deficiencies. The Engineering Logistics Concept of Operations (ECONOP) was developed to define the future Coast Guard logistics system and describe how it will support its customers. A new organization , the Engineering Logistics Center (ELC), was established that consolidated and integrated key logistics functions and organization for better management. Both of these initiatives involved high level business process re-engineering of logistics processes. Without an

integrated information system, the new organizations and business processes will not have the basic information and analytical tools to correct the deficiencies.

All of the Coast Guard's Strategic Goals are supported through the logistical support of all the units which perform the missions which support safety, protection of natural resources, mobility, maritime security, and national defense. The linkage to the annual GPRA performance plan and performance measures is related to the output performance of the units performing the missions which effect the outcome performance of the stated goals. The linkage between FLS and GPRA goals is indirect, but has a significant impact on how well the Coast Guard performs.

b) Program Management

The sponsor for FLS is G-S, with G-SL acting as the sponsor's representative and program manager. The project staff for the acquisition of FLS is G-AFL headed by the Project Officer. The Coast Guard employs a matrix team approach, which includes representatives from Coast Guard Acquisitions, Logistics, and other offices and field organizations.

c) Contract Strategy

Under the authority of the Economy Act, the Coast Guard proposes to place task orders against existing service contracts available through the General Services Administration's (GSA) Federal Information System Support Program (FISSP). By utilizing GSA's competitively awarded contracts, the FLS project drastically reduces procurement lead time, thereby accelerating the FLS schedule and reducing Coast Guard staff support costs. Additionally, the FLS Project Manager negotiated with GSA to reduce the administrative fee charged by GSA for placing orders from 14% to 4%. The GSA desk officer for the FLS Trail Boss Delegation of Procurement Authority (DPA) endorses the use of FISSP as an acceptable acquisition strategy.

d) OA/OST Goals Supported

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

e) DOT Goals Supported

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

f) Cost, Schedule and Performance Goals:

**PART I: SUMMARY OF SPENDING FOR PROJECT STAGES**

(in millions)

| | Prior to FY97 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04and beyond | Total. |
|---|---|---|---|---|---|---|---|---|---|---|
| Planning: [1] | | | | | | | | | | |
| Budget authority..... | | 8.8 | | | | | | | | 8.8 |
| Outlays..... | | 8.8 | | | | | | | | 8.8 |
| Full acquisition: (all segments) | | | | | | | | | | |
| Budget authority..... | | 8.5 | 9.3 | 9.2 | 9.2 | | | | | 36.2 |
| Outlays..... | | 6.4 | 8.6 | 8.9 | 9.2 | | 3.1 | | | 36.2 |
| Total, sum of stages..... | | | | | | | | | | |
| Budget Authority..... | | 17.3 | 9.3 | 9.2 | 9.2 | | | | | 45.0 |
| Outlays..... | | 15.2 | 8.6 | 8.9 | 9.2 | | 3.1 | | | 45.0 |

[1] Includes all OE, R&D and AC&I funding associated with the SAIL (System to Automate and Integrate Logistics) initiative.

**PART III: COST, SCHEDULE AND PERFORMANCE GOALS**

A. Description of performance based system: FLS will be developed incrementally through numerous interagency acquisitions to GSA FISSP. GSA FISSP will issue task orders as either fixed firm price or time and material work requests to execute the project. Depending upon the type of contract, performance goals are deemed to have been met when the Coast Guard, based upon the negotiated schedule for deliverables, accepts the required deliverables from the contractor or certifies that the contractor provided a reasonable level of effort in accordance with the task plan.

(in millions)

| | Prior to FY97 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04and beyond | Total |
|---|---|---|---|---|---|---|---|---|---|---|

B. Previous baseline goals: Previous baseline goals reflected the mid-range estimate for cost and also included previous OE, R&D and AC&I funding of $8.8M associated with SAIL.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cost: | 17.3 | 9.3 | 9.2 | 0.3 | 0.1 | | | | | 36.2 |

2. Schedule: No previous schedule goals were submitted
3. Performance: No previous performance goals were submitted.

C. Baseline goals: Baseline goals for cost were modified to reflect the upper end of the cost range in the approved Acquisition Project Baseline (APB), and *exclude* funding associated with SAIL; schedule and performance reflect the "threshold" for the critical events/parameters specified in the Operational Requirements Document (ORD).

(in millions)

| | Prior to FY97 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04and beyond | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cost: | 9.4 | 16.5 | 16.4 | 0.3 | 0.1 | | | | | 42.7 |

2. Schedule:

| | |
|---|---|
| Initial Operational Capability (IOC): | FY 98 Q4 |
| Key Decision Point (KDP) 4: | FY 98 Q4 |
| Full Operational Capability (FOC): | FY 99 Q4 |

3. Performance:

| | |
|---|---|
| System Availability: | |
| During work hours (e.g., 0800-2000 EST) | 96% availability |
| During off hours (e.g., 2000-0800 EST) | 90% availability |
| On-line System Response Time: | 85% of the time 5-10 seconds<br>10% of the time 10-30 seconds<br>04% of the time 30-60 seconds<br>01% of the time > 60 seconds |
| Security: | Required security controls: Management, Development, Acquisition, Operational, Training, Technical in place prior to FOC. |
| Supportability: | Required support elements: Maintenance, Training, Equipment, Facilities in place prior to FOC. |
| System Interoperability: | Capable of exchanging data with CMplus prior to IOC. |

D. Current estimate: Current estimate for cost for PY reflects an internal reprogramming reduction of $1M; schedule and performance reflect the "objective" for the critical events/parameters specified in the ORD.

(in millions)

| | Prior to FY97 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04and beyond | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cost: | 8.5 | 8.3 | 9.2 | 9.2 | | | | | | 35.2 |

2. Schedule:

| | |
|---|---|
| Initial Operational Capability (IOC) | FY 98 Q1 |
| Key Decision Point (KDP 4) | FY 98 Q2 |
| Full Operational Capability (FOC) | FY 99 Q1 |

3. Performance:

| | |
|---|---|
| System Availability: | |
| During work hours (e.g., 0800-2000 EST) | 98% availability |
| During off hours (e.g., 2000-0800 EST) | 90% availability |
| On-line System Response Time: | 85% of the time < 5 seconds<br>10% of the time 5-10 seconds<br>04% of the time 10-30 seconds<br>01% of the time > 30 seconds |
| Security: | Required security controls: Management, Development, Acquisition, Operational, Training, Technical in place prior to IOC |
| Supportability: | Required support elements: Maintenance, Training, Equipment, Facilities in place prior to IOC. |
| System Interoperability: | Capable of exchanging data with all external systems identified in the ORD prior to IOC. |

E. Variance from baseline goals:
1. Cost: N/A
2. Schedule: N/A
3. Performance: N/A

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Key Decision Point 1 - 12 May 94
- Key Decision Point 2/3 - 19 Aug 96

- Key Decision Point 4 - Q4 FY 98

**PROJECT STATUS:** Research and/or Development.

**MAJOR SYSTEMS REQUIREMENTS:**

The need for providing an integrated logistics system for supply and maintenance support of Coast Guard cutters and standard boats is called the Fleet Logistics System (FLS). Providing vessel logistics support requires a large and complex process that is currently fragmented, lacks coordination between its major functional components and lacks adequate automated information systems. As a result, logistics support is not as efficient as it should be and the Coast Guard has been, and continues to be, criticized by Congress (GAO), the DOT IG and others for inefficient management and use of its existing logistics system.

The ideal logistics cycle is a closed loop process with four critical areas: Mission, Configuration, Maintenance and Supply. The mission is the driving requirement for the other three: the mission drives the vessel configuration (detailed engineering information about a vessel and its equipment); the configuration drives the need for maintenance; and the need for maintenance drives the need for supplies of parts and equipment to outfit a mission capable vessel.

The main problem with Coast Guard vessel logistics is that these areas are not linked or integrated. Each of the mission support areas tend to focus toward the mission, not to each other. Maintenance planning is done without sufficient input from the configuration and supply areas. Supply support is reactive and not driven by configuration based maintenance requirements. Existing configuration plans are not followed. Maintenance functions may change the configuration without the configuration data being updated.

This main problem also extends to the logistics automated information systems. The information systems that support critical logistics areas are also not linked or integrated. Organizations collect and maintain limited data in a variety of information systems that support only their direct information needs. There is no central capability to collect, maintain, aggregate and communicate the information needed for effective planning, monitoring, control of performance measurement, integration or management of the individual logistics mission support areas, or the overall logistics process.

Another shortcoming of the current logistics system is the lack of automated information systems. This issue will magnify as the Coast Guard's budget continues to shrink. Resulting cutbacks in personnel resources will highlight the need for further automation. If the Coast Guard is to continue fulfilling its missions, it must adapt and operate with a smaller workforce. Automation is a key element in meeting this challenge.

Over the past several years, the Coast Guard has devoted a great deal of energy to developing a remedy for these logistics deficiencies. The Engineering Logistics Concept

of Operations (ECONOP) was developed to define the future Coast Guard logistics system and describe how it will support its customers. A new organization , the Engineering Logistics Center (ELC), was established that consolidated and integrated key logistics functions and organization for better management. Both of these initiatives involved high level business process re-engineering of logistics processes. Without an integrated information system, the new organizations and business processes will not have the basic information and analytical tools to correct the deficiencies.

FLS is being developed in a partitioning strategy. Functionality is being added with successive versions due to the large scope of the project. Successive versions will be built from the previous version with enhancements added until full functionality is reached by the end of fiscal year 1999. This reduces the overall risk to the project due to the magnitude of functionality and contractor abilities to handle it. The incorporation of COTS/GOTS packages continues to be studied throughout the analysis and development effort with the deciding factor being the total life cycle costs of the project.

All of the Coast Guard's Strategic Goals are supported through the logistical support of all the units which perform the missions which support safety, protection of natural resources, mobility, maritime security, and national defense. The linkage to the annual GPRA performance plan and performance measures is related to the output performance of the units performing the missions which effect the outcome performance of the stated goals. The linkage between FLS and GPRA goals is indirect, but has a significant impact on how well the Coast Guard performs.

**INITIATIVE ID:** USCGO003

**TITLE OF PROGRAM/PROJECT:** Federal Telephone Service 2000 (FTS2000)

**NEW PROJECT (50% OR MORE IS IT COST - PER CLINGER-COHEN ACT - YES OR NO_____):** No

**ONGOING PROJECT (50% OR MORE IS IT COST - YES OR NO_____):** Yes

**BUDGET ITEM NUMBER:** 69-0240-0-1-999

**FY-97 5-YEAR IT PLAN PAGE NUMBER:** Page 5.18

**ORGANIZATION/ENTITY:** USCG/G-SCT; TISCOM

**TYPE:** PII

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Eugene Vogt, (202) 267-1348

**DESCRIPTION:** The Federal Telephone System is the GSA mandated telephone system for the federal government. FTS2000 is the name for the current federal telephone system leased from AT&T and Sprint. The FTS account is a utility account. FTS2000 is the primary voice communications network used by the Coast Guard at virtually all of its facilities and installations ashore. Thus, it is an essential component of the Coast Guard's telecommunications infrastructure and supports all mission areas and business processes. FTS2000 consolidates governmental switched voice and enhanced service to a contracted provider. This contract allows the Coast Guard to realize increased savings over commercial service while establishing a conduit for services. FTS2000 service provides switched voice service for routine traffic, while providing enhanced services such as packet switched service for Differential Global Positioning System (dGPS).

**SUMMARY OF SPENDING FOR PROGRAM/PROJECT STAGES (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 6.800 | $ 7.000 | $ 7.100 | $ 7.100 | $ 7.100 | $ 7.100 | $ 7.100 | $ 7.100 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 56.400

**JUSTIFICATION AND OTHER INFORMATION:**

a) Justification and Other Information

The Federal Telephone System is the GSA mandated telephone system for the federal government. FTS2000 is the name for the current federal telephone system leased from

AT&T and Sprint. The FTS account is a utility account.

b) Program Management

Managed by TISCOM (OPS).

c) Contract Strategy

FTS2000 consolidates governmental switched voice and enhanced service to a contracted provider. This contract allows the Coast Guard to realize increased savings over commercial service while establishing a conduit for services.

d) OA/OST Goals Supported:

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.
- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

e) DOT Goals Supported:

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

f) Cost Schedule and Performance Goals

Several initiatives are in progress at TISCOM to reduce overall FTS charges, such as decentralizing the management of FTS. Previously, all FTS bills were received by the FTS Department Agency Representative (DAR) at TISCOM. TISCOM developed a way to distribute call detail reports to unit commanders, thus providing some "ownership" to their respective call volume on FTS2000. Our goal is to charge individual units for all enhanced services beyond the basic switched voice. These services include (1-800) service, dedicated transmission service, packet switched service, and NSAP services.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Call distribution reports provided to individual units - Completed 6/97
- Milestone 2: Obtain all billings on CD ROM to allow enhanced analysis - Completed 8/97
- Milestone 3: FTS2000 calling cards can now be ordered on the standard IMPAC card - Completed 8/97
- Milestone 4: Work to transition all Coast Guard current FTS2000 services to the new FTS contract when it is issued by GSA - Projected 10/98

**PROJECT STATUS:** System Maintenance

**MAJOR SYSTEMS REQUIREMENTS:**

(1) The current FTS2000 contract managed by GSA is scheduled to expire at end of FY98. GSA is in the middle of providing a follow-on contract. However, GSA has indicated that they will only fund transition of basic voice services from the current contract to the follow-on contract. Individual agencies will be responsible for transitioning all other services previously contracted with the FTS2000 contract. This will require a major effort of the management staff to identify all non-basic services and transition them to the new contract when it is in place.

**INITIATIVE ID:** USCGO004

**TITLE OF PROGRAM/PROJECT:** Marine Information For Safety & Law Enforcement (MISLE)

**NEW PROJECT (50% OR MORE IS IT COST - PER CLINGER-COHEN ACT - YES OR NO_____):** No

**ONGOING PROJECT (50% OR MORE IS IT COST - YES OR NO__):** Yes

**BUDGET ITEM NUMBER:** 69-0240-0-1-999

**FY-97 5-YEAR IT PLAN PAGE NUMBER:** Page 5.19

**ORGANIZATION/ENTITY:** USCG/G-AIR

**TYPE:** PIM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR David Wilder, (202) 267-2204

**DESCRIPTION:** This project will use the "Mission Oriented Information Systems Engineering" (MOISE) acquisition for system and software development, integration, deployment, initial operation, enhancement, and support of three cross-functional information systems: The Marine Safety Network (MSN) , The Vessel Identification and Documentation System (VIDS), and the integration with the Law Enforcement Information System II (LEIS II). The MISLE system will be designed to operate in the Standard Workstation III environment with a centralized database. The G-M business plan is based on the Set Goals - Empower - Manage Risk - Measure formula to achieve desired program outcomes. The MISLE system will provide data for the third and fourth elements of this formula, Manage Risk and Measure. Database administration and system manager support services are crucial to ensure successful system functionality in providing valid/accurate data usable for improved management decision support. Nearly all program goals will be supported by the MISLE system through the measurement and analysis of G-M program data.

**SUMMARY OF SPENDING FOR PROGRAM/PROJECT STAGES (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 12.963 | $ 9.644 | $11.789 | $ 12.492 | $ 12.323 | $ 9.253 | $ 9.501 | $ 72.035 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 150.000

**JUSTIFICATION AND OTHER INFORMATION:**

a) Justification and Other Information

The MISLE project will provide replacement systems for the Marine Safety Information System (MSIS) and the Law Enforcement Information System (LEIS). It will satisfy the legislative mandate of Public Law 100-700 which requires the establishment of a nationwide vessel identification system and the modernization of maritime commercial instruments and liens processing. Systems are necessary to meet the information needs and legal mandates of the Marine Safety, Environmental Protection, and Law Enforcement Programs. MSIS hardware and software are technically obsolete, increasingly difficult to maintain, and unable to support the missions of the Office of Marine Safety, Security and Environmental Protection throughout the 1990's. Vessel Identification and Documentation System (VIDS) must be developed since there are no existing systems that can satisfy the requirements of PL 100-710. The Law Enforcement Information System II (LEIS) will be integrated with the Marine Safety Network (MSN) and VIDS to provide cross-functional support to the USCG and other State and Federal law enforcement agencies.

b) Program Management

The program is managed by the Acquisition Directorate (G-A). The program sponsor for the Marine Safety Network (MSN) and Vessel Identification System (VIDS) is the Marine Safety Directorate (G-M). The program sponsor for the Law Enforcement Information System (LEIS II) is the Operations Directorate (G-O).

c) Contract Strategy

The MISLE acquisition strategy makes use of the Coast Guard technical infrastructure procurements for workstations, servers, wide area network and systems operation. The software development and integration contract was competitively awarded. The contract uses task orders to incrementally award portions of the system for development. An award fee pool is used to encourage superior performance and align government/contractor expectations for cost, schedule, and quality trade-offs. Task Orders are structured to encourage the contractor to seek COTS solutions as a means of maximizing profits.

d) OA/OST Goals Supported

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

e) DOT Goals Supported

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

f) Cost Schedule and Performance Goals

Although the MISLE modules will be developed incrementally, system level analysis of the requirements has allowed the identification of common components which can be reused on successive developments. Technical proofs of concept are used to validate the feasibility of proposed solutions to high technical risk areas, such as data synchronization with a large legacy system. This has allowed the Coast Guard to quickly determine the viability of a technical approach and make early changes to the approach when warranted. Each incremental release will be fielded to a limited number of sites to ensure the product adequately fulfills its intended purpose prior to committing to full deployment. Earned value and technical metrics are used to monitor the contractor's progress towards developing a quality system on time at cost.

- Designated as a Major Acquisition: March 1992

- Mission Need Statement Approval: June 1992

- MOISE RFC Released: October 1992

- MOISE RFP Released: July 1993

- MOISE Contract Award January 1995

- Key Decision Point 2/3: March 1996

- VIDS-VIS Development Complete: 1 QTR FY 98

- Key Decision Point 4 : 3rd QTR FY 98

- System Development Complete 4 QTR FY 02

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Key Decision Point 1 March 1992
- Key Decision Point 2/3 March 1996
- Key Decision Point 3rd Qtr FY98

**PROJECT STATUS:** System Development

**MAJOR SYSTEMS REQUIREMENTS:**

*SUPPORT CORE/PRIORITY MISSION FUNCTIONS THAT NEED TO BE PERFORMED BY THE FEDERAL GOVERNMENT*

The MISLE system directly supports core Coast Guard missions:

(a) Port Safety & Security

(b) Marine Inspection

(c) Marine Licensing & Certifying

(d) Marine Environmental Protection

(e) Enforcement of Laws & Treaties

(f) Recreational Boating Safety

*SPECIFIC STATUTES WHICH REQUIRE THE COAST GUARD TO DEVELOP INFORMATION SYSTEMS*

(a) Port and Tanker Safety Act of 1978

(b) Ship Mortgage Act of 1978

(c) Oil Pollution Act of 1990

**INITIATIVE ID:** USCGO005

**TITLE OF PROGRAM/PROJECT:** National Distress System (NDS) Modernization Project

**NEW PROJECT (50% OR MORE IS IT COST - PER CLINGER-COHEN ACT - YES OR NO_____):** No

**ONGOING PROJECT (50% OR MORE IS IT COST - YES OR NO_____):** Yes

**BUDGET ITEM NUMBER:** 69-0240-0-1-999

**FY97 5-YEAR IT PLAN PAGE NUMBER:** Not available at time FY97 IT Plan submitted to DOT

**ORGANIZATION/ENTITY:** USCG/G-AIR

**TYPE:** PCS, PII

**ORGANIZATIONAL POINT OF CONTACT:**
CDR Jon Allen, 202-267-2811

**DESCRIPTION:** The National Distress System (NDS) Modernization Project will allow the Coast Guard to receive maritime distress and emergency response alerts and will allow Command and Control ($C^2$) of responding facilities for search and rescue and all other operational missions that occur in coastal and inland waterway areas into the 21st century. The modernized system's primary function is to receive maritime distress alerts, coordinate search and rescue response operations, and communicate with commercial and recreational vessels. Its secondary function is to provide Command and Control ($C^2$) for Coast Guard units performing Maritime Safety, Maritime Law Enforcement, National Security, and Marine Environmental Protection missions. It will fill several critical capability gaps identified in the U.S. Coast Guard Command, Control, Communications, Computers, and Intelligence ($C^4I$) Baseline Architecture (COMDTINST 3090.6).

The system will perform these vital functions in support of Coast Guard missions:

(1) Provide continuous and comprehensive VHF-FM coverage in all coastal areas of the continental U.S., Hawaii, Puerto Rico, the U. S. Virgin Islands, Guam, the Great Lakes, and major inland bays and waterways.

(2) Provide coverage to at least 20 nautical miles offshore, or to the extent of existing coverage, whichever is greater.

(3) Receive distress and emergency alerts and determine geolocation.

(4) Provide voice and data communications between shoreside and mobile Coast Guard facilities; between Federal, state, and local agencies; and the commercial and recreational boating public.

(5) Provide sufficient voice and data communications capacity to support multiple operations in one or more operating areas.

(6) Protect sensitive communications with and between Coast Guard facilities and units of other governmental agencies.

(7) Record, time stamp, and provide instant playback /archival of unclassified information.

(8) The system will automate operational messages, such as urgent marine information and marine safety information to localized geographic areas.

**SUMMARY OF SPENDING FOR PROGRAM/PROJECT STAGES (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.765 | $ 5.770 | $ 5.770 | $ 17.770 | $ 50.770 | $ 54.770 | $ 60.770 | $ 102.615 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions)*:** $300.000
* Values for Total Life Cycle Costs are estimates taken from a 1994 preliminary Life Cycle Cost Estimate report and then updated. A comprehensive Life Cycle Cost Estimate report will be completed prior to KDP 2/3 (3rd Qtr FY98)

**JUSTIFICATION AND OTHER INFORMATION:**

a) Justification and Other Information

The current VHF-FM based National Distress System comprises approximately 300 antenna sites with analog transceivers which are remotely controlled by regional communication centers and selected Coast Guard stations. The system provides coverage out to approximately 20 nautical miles from shore in most areas. It was originally built to provide the Coast Guard with a means to monitor the international maritime VHF-FM distress frequency and to coordinate search and rescue operations.

The present system does not provide complete coverage of continental U. S. coastal areas, the Great Lakes, bays, inlets, and river systems. Over 65 verified gaps and numerous localized coverage deficiencies identified within the existing system. Much of the existing equipment was installed in the 1970s; is no longer commercially available off-the-shelf, and is becoming increasingly difficult to support. The expected service life of electronic equipment installed during this period was 15 years. Equipment failures have necessitated the replacement of many system components that are no longer commercially available, resulting in a lack of standardization. Non-standardized multi-channel recorders, instant

playback recorders, and localized direction finding equipment were installed in some locations to meet needs identified after the original system's construction. These changes have contributed to the lack of system integration and standardization. A major objective of this acquisition will be to gain use of a complete and integrated system that will improve operational performance and reduce life cycle costs.

b) Program Management

The program is managed by the Acquisition Directorate (G-A). There is a project manager, a contracting officer, and a full-time acquisition staff dedicated to the project. Additionally, the Coast Guard employs a matrix team approach to assist with the management of the project. The program sponsor for the NDS is the Operations Directorate (G-O).

c) Contract Strategy

To be determined. The NDS Project is in the Concept Exploration Phase and a performance-based specification is being developed for the system. Following development of a specification, a determination will be made of contract type or types which will be used. It is envisioned that the NDS acquisition will be done in a Full and Open contracting environment.

d) OA/OST Goals Supported

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world’s premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

e) DOT Goals Supported

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

f) Cost, Schedule, and Performance Goals

Contract has not yet been awarded. However, it is envisioned that the awarded contractor will provide Cost and Schedule Status Reports based on an Earned Value System. These reports will allow the Coast Guard to examine the contractor's cost and schedule estimates, variances, and projections for completion.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

As previously noted, the Contract Strategy is to be determined; as such the following milestones are subject to change significantly.

SELECTED NDS MILESTONES

| | |
|---|---|
| Key Decision Point (KDP) 1 | MAR 96 |
| KDP 2/3 Approved | Q3 FY98 |
| Issue CBD for Capability Statements/Past Performance Information | Q3 FY98 |
| Advisory Down Selection | Q4 FY98 |
| Issue RFP | Q4 FY98 |
| Source Selection Decision | Q3 FY99 |
| Award SI Contract | Q3 FY99 |
| Finalize NDS Design | Q2 FY00 |
| Develop Prototype | Q2 FY01 |
| DT | Q3 FY01 |

| | |
|---|---|
| OT | Q4 FY01 |
| IOC | Q4 FY01 |
| KDP 4 | Q1 FY02 |
| Begin Production/Deployment | Q1 FY02 |
| Complete Production/Deployment | Q4 FY04 |
| FOC | Q4 FY04 |

**PROJECT STATUS:** The National Distress System Modernization Project is in the "Concept Exploration" Phase. During this phase, an tradeoff analysis will be conducted to support agency decision-making regarding final operational requirements, technical feasibility, and cost effectiveness of proposed system capabilities. Preliminary operational requirements have been validated with external customers and partners (including federal, state, local agencies, commercial entities and volunteering entities).

**MAJOR SYSTEMS REQUIREMENTS:**

(1) Core Mission Functions. The Coast Guard is required by Congress (14 USC 2, 14 USC 88) with the establishment and maintenance of rescue facilities for the promotion of safety on, under, and over the high seas and waters subject to the jurisdiction of the United States. The Coast Guard is authorized to perform any and all acts necessary to rescue and aid persons and protect property at sea, and is authorized by 14 USC 141 to utilize its personnel and facilities to assist Federal and State agencies upon request.

(2) Alternative Sources. There is no private sector or government source who can efficiently perform the functions. The Coast Guard performs maritime law enforcement, marine environmental protection, and is a military service with a vital national defense role. The Coast Guard successfully and efficiently accomplishes this combination of missions through strong emphasis of its multimission nature.

(3) Use of COTS. The NDS Modernization Project is designed to maximize off-the-shelf technology and standardize equipment in the field, thus reducing total life-cycle costs. The current National Distress System began with 1970s technology which has undergone several incremental modifications in the past twenty years in order to meet expanding mission needs. The NDS Modernization Project will ensure that this vital communications network will meet the needs of the 21st century maritime community.

(4) Projected Return on Investment. The NDS will improved mission performance in support of the Coast Guard's GPRA goals. Specific benefits will be highlighted in the Cost-Benefit Analysis to be submitted at Key Decision Point 2/3.

(5) Architecture Consistency. The NDS Modernization Project seeks to maximize mission performance and flexibility by ensuring consistency with international and national system performance goals and standards, including those of the International Maritime Organization (IMO), the Public Safety Wireless Advisory Committee (PSWAC), Project 25, and other national standards.

(6) Risk Management. The NDS Modernization Project seeks to reduce risk using integrated NDI/COTS/GOTS equipment, and by actively seeking the views of customers, industry, and other stakeholders early in the project through the use of an extensive outreach program and the Internet.

(7) Project Phase Management. The NDS Modernization Project will be implemented in phases as possible; this plan is currently under development.

(8) Acquisition Strategy. This project will use "full-and-open" competition and NDI/COTS equipment to maximize industry competition and obtain best-value, ensuring commercial technology is leveraged to maximum advantage. Future mission essential applications will be able to take advantage of the additional capabilities provided by the flexibility and open architecture of the new system.

**INITIATIVE ID:** USCGO006

**TITLE OF PROGRAM/PROJECT:** Operational Information System (OIS)

**NEW PROJECT (50% OR MORE IS IT COST - PER CLINGER-COHEN ACT - YES OR NO_YES_____):** No

**ONGOING PROJECT (50% OR MORE IS IT COST - YES OR NO____YES_____):** Yes

**BUDGET ITEM NUMBER:** 69-0240-0-1-999

**FY-97 5-YEAR IT PLAN PAGE NUMBER:** Page 5.50

**ORGANIZATION/ENTITY:** USCG/G-OCC

**TYPE:** PIM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Steve Bednar, (202) 267-0482

**DESCRIPTION:** Project to tie operational information between sources, command and control elements and data base elements. Successful performance of mission for Coast Guard Groups and Stations requires conducting a wide variety of operations that must be supported with an effective process for collecting, analyzing, and disseminating time-sensitive operational information and for providing command direction for ongoing operations. In the current environment , some of the problems include: redundant data entry, information not available to field personnel, inadequate communications, inadequate resource picture, cumbersome tasking process, poor systems integration, and multilevel security deficiencies. The implementation of an OIS will improve effectiveness and reduce mission effort, and post-mission reporting. OIS will improve the source data collection, provide a data repository, provide improved information which will support Command and Control functions, and significant improvements in the quality and timeliness of reported program information. An improved operational information system will produce benefits to all operational and support areas, the most important benefit being improved efficiency of operational resources. The coxswain and boarding officer can make many routine reports with less effort. Command and control personnel will have the capability to immediately identify available and capable resources to determine the most efficient response platform.

**SUMMARY OF SPENDING FOR PROGRAM/PROJECT STAGES (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 1.000 | $ 6.000 | $ 10.000 | $ 20.000 | $ 6.000 | $ 6.000 | $ 18.000 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 67.000

**JUSTIFICATION AND OTHER INFORMATION:**

a) Justification and Other Information

One of the Coast Guard's strategic goals in support of GPRA is Safety. One of the Performance goals supporting the Safety concept is to save at least 90% of mariners in imminent personal danger. The OIS system will provide better command and control capabilities to District commanders. This will increase the chances of saving someone by sending the best available resource to conduct the Search and Rescue mission.

In addition, the OIS system will reduce the time required for a boarding of a vessel. The computer will help to generate the 4100 form and it will be given to the mariner. The improved communications which results from the implementation of OIS will allow for improved response to Law Enforcement cases as well as Search and Rescue. This will make the Coast Guard more effective in carrying out its various missions.

b) Program Management

There is an OIS Guidance Team which provides direction to the current project management team. After the Mission Needs Statement is approved, it is envisioned that the Acquisition program (G-A) will assume program management responsibility. G-A will follow the policy for Major Acquisitions.

c) Contract Strategy

Competitive. One contract to build the OIS system and another to provide the ruggedized laptops and other required hardware.

d) OA/OST Goals Supported

- GOAL 5: Enhance and extend our reputation as the world's premier maritime service.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

e) DOT Goals Supported

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

f) Cost Schedule and Performance Goals

- No previous baseline goals exist

- Baseline goals: Cost of $67million life cycle; Begin development in FY99 and complete development by FY01; begin implementation in FY01 and complete in FY02; No performance goals have yet been established.
- Current Estimate is the same as baseline goals
- No corrective action is currently planned
- There are no proposed revisions to baseline goals

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Acquisition 9/99
- Development 9/00
- Implementation 9/01
- Maintenance 10/01 and beyond

**PROJECT STATUS:** Prototyping/Limited Production

**MAJOR SYSTEMS REQUIREMENTS:**

The U. S. Coast Guard has long recognized the need to use advances within the computer industry to improve the process for collecting, analyzing and disseminating time-sensitive operational information. To address these needs, the U. S. Coast Guard Research and Development Center conducted two proof-of-concept projects, Operational Information System (OIS) phase I and II. The research and development effort has resulted in a current AC&I project sponsored by the Office of Command and Control Architecture (G-OCC).

G-OCC has conducted a Mission Need Statement (MNS) and both a Mission Analysis Report (MAR) Part I and Part II. The MAR Part II recommends building a prototype system which can be expanded upon and used as a model to implement a Coast Guard wide OIS.

**INITIATIVE ID:** USCGO007

**TITLE OF PROGRAM/PROJECT:** Coast Guard Standard Workstation III (SWIII)

**NEW PROJECT (50% OR MORE IS IT COST - PER CLINGER-COHEN ACT - YES OR NO_____):** No

**ONGOING PROJECT (50% OR MORE IS IT COST - YES OR NO_____):** Yes

**BUDGET ITEM NUMBER:** 69-0240-0-1-999

**FY-97 5-YEAR IT PLAN PAGE NUMBER:** Page 5.14

**ORGANIZATION/ENTITY:** USCG/G-SCC

**TYPE:** PSS

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Patricia Thompson, (202) 267-1323

**DESCRIPTION:** The SWIII Project incorporates all aspects of the Coast Guard's Migration from its existing CG standard, proprietary microcomputer environment (CGSWII) to one based on Federal open system standards. The SWIII acquisition provides hardware, software, networking, training, support services and warranty/maintenance to meet the Coast Guard's microcomputing business requirements.

**SUMMARY OF SPENDING FOR PROGRAM/PROJECT STAGES (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 42.000 | $ 41.200 | $ 48.200 | $ 21.500 | $ 20.000 | $ 23.700 | $ 20.000 | $ 24.000 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 240.600

**JUSTIFICATION AND OTHER INFORMATION:**

a) Justification and Other Information

The SWIII migration, based on the acquisition and deployment of commercial-off-the-shelf (COTS) hardware and software, is a phased replacement of the CG-wide microcomputer infrastructure which began in FY95 and will be complete in FY00. The spending plan includes the lifecycle cost estimates for the acquisition of hardware, software and recabling as well as the expenditures for training, support services and maintenance. The follow-on portion of this project begins in FY01. This will encompass continuing maintenance, training, and technical support. It also includes recapitalization of the SWIII base as needed to replace outdated hardware and to remain current with

evolving technology as well as upgrade as needed of the existing LAN and WAN infrastructures to meet future telecommunication requirements.

The current CTOS microcomputer architecture which is being replaced is proprietary and technologically outdated. In addition, the CTOS hardware and software is not readily available in the market, but is sold by a limited number of vendors, hence there is little incentive for price competition. The new infrastructure is based on COTS hardware and software (Windows NT with Microsoft Office Professional). The benefits of replacing the infrastructure with technologically current COTS products based on open system standards outweigh the costs of replacement.

When fully implemented, the SWIII project provides an organization-wide microcomputer infrastructure in direct support of Coast Guard-wide interoperability (information systems, e-mail, data transfer, etc.). The project provides the primary application development environment and host platform for mission essential applications and office automation. By migrating to a microcomputer architecture that complies with federal open system standards, not only will the near term IT requirements for a common operating environment that is commercially available be met, but the Coast Guard will be poised to continue to move forward with the dynamic changes in microcomputer technology. By implementing a Coast Guard-wide microcomputer infrastructure that is in line with industry standards, programmatic risk is minimal.

b) Program Management

The SWIII Replacement Project oversees the Coast Guard-wide transition from CGSWII to SWIII. The project is centrally managed and funded. The Project works closely with the contracting officer to coordinate SWIII planning and deployment needs with the contractual aspects of the project. The project coordinates, prioritizes, and schedules the numerous facets of the transition process including, but not limited to:

1) The physical replacement and deployment of computer cabling and hardware platforms
2) Acquisition of open systems based operating system and application software
3) Training
4) Support/Maintenance

c) Contract Strategy

The CGSWII contract which provided the proprietary CTOS standard workstation infrastructure expired in July 1996. The new SWIII contract, which was awarded in June 1995 is an IDIQ contract for COTS hardware, software, networking and support services. It was structured with a base year and 5 option years, with a contractual minimum of $15M in purchases. The Coast Guard has met this minimum amount. Selection of an IDIQ contract with a minimum mandatory expenditure provides flexibility for the Coast Guard to purchase industry standard hardware and software at competitive prices with

warranty and hotline support provisions that best meet the operational needs of the Coast Guard in its many US and international locations. Comparisons with alternative sources of technology are an integral part of the contract management and provide the basis for continued refreshment of the technology and prices available on this contract. The SWIII contract and replacement project provide the Coast Guard with the contract vehicle and resources for acquiring information technology to meet its increasing IT needs. Follow-on support is required to ensure the viability of the newly installed SWIII base.

The SWIII replacement project is integral to, and directly linked to all major Coast Guard IT initiatives. When fully implemented, the project provides an organization-wide microcomputer infrastructure in direct support of Coast Guard-wide interoperability (information systems, e-mail, data transfer, etc.).

d) OA/OST Goals Supported

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential.

- GOAL 3: Meet the mandate to streamline wit no reduction in essential services.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

e) DOT Goals Supported

Note: The SWIII project provides the computing infrastructure to support systems encompassing all of the DOT Strategic Goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation**.**

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability
-

f) Cost Schedule and Performance Goals

Baseline Goals as defined in the Migration Management Plan approved by the Chief of Staff, June 1995.

Total Cost for replacing 24,241 CPUs -- the maximum number allowed.

| | |
|---|---|
| Hardware/Software | $96.1M |
| Training | $ 5.8M |
| Support | $65.3M |
| | 167.2M |
| Recabling | $25.0M |
| Total: | 192.2M |

Schedule:

| | |
|---|---|
| Contract Award: | June 1995 |
| Acceptance Testing: | FY95 |
| Phase 1 Migration: | Headquarters and IT testbeds FY96 |
| | Administrative units including Areas, MLCs district offices FY96 - 97 |
| Phase 2 Migration: | Administrative Units including HQ units FY98 |
| Phase 3 Migration: | Operational Units including all field units FY98 - 00 |

Current Estimate as briefed to the Commandant, June 1997

Total Cost for replacing 24,241 CPUs -- the maximum number allowed.

| | |
|---|---|
| Hardware/Software | $98.4M |
| Training | $ 3.8M |
| Support | $40.6M |
| - Subtotal: | 142.8M |
| Recabling | $52.2M |
| Total | 195.0M |

Schedule:

| | |
|---|---|
| Contract Award: | June 1995 |
| Acceptance Testing: | FY95 |
| Phase 1 Migration: | Headquarters and IT testbeds FY96<br>Administrative units including Areas, MLCs district offices<br>FY96 - 97 |
| Phase 2 Migration: | Administrative Units including ISCs, NESUs, HQ units<br>FY98 |
| Phase 3 Migration: | Operational Units including all field units<br>FY99 - 00 |

Variance from Baseline - Corrective Actions

The total estimated cost for the SWIII Replacement Project has not varied significantly from the original baseline estimates approved in June 1995. However, individual elements of the estimate have varied based on changing project assumptions, refined estimates drawn from lessons learned, and fluctuations in market conditions which affect the cost of various technology products. Overall, the cost element increases in recabling have been compensated for by decreases in project support/maintenance costs. The recabling increase reflects the additional cost of recabling the cutter fleet, a cost which was not well defined at the time of the original baseline. This cost will be revised based on prototyping of representative cutters in FY97. The Coast Guard is enforcing configuration management standards on all workstation systems, so that the cost of support will be constrained.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- **Milestone 1**: Contract Award - 6/95

- **Milestone 2:**
  - ⇒ Phase 1 Migration: Headquarters and IT testbeds FY96; Completed 1/97
    Administrative units including Areas, MLCs district offices
    FY96 - 97; Completed 9/97

- **Milestone 3**:
  - ⇒ Phase 2 Migration: Administrative Units including ISCs, NESUs, HQ units
    FY98; Completion target 9/98

- **Milestone 4**:
  - ⇒ Phase 3 Migration: Operational Units including all field units
    FY99 - 00; Completion target 12/00

**PROJECT STATUS:** System Deployment in phases as listed above

**MAJOR SYSTEMS REQUIREMENTS:**

1. SUPPORT CORE/PRIORITY MISSION FUNCTIONS THAT NEED TO BE PERFORMED BY THE FEDERAL GOVERNMENT.

SWIII will be used in support of all the core mission areas of the Coast Guard. SWIII is replacing a proprietary IT infrastructure with commodity servers, workstations, LANs and office automation software that the program managers will be leveraging to improve their efficiency and effectiveness. It will support the field user's operational applications, as well as their administrative applications, within the same desktop environment.

2. BE UNDERTAKEN BY THIS REQUESTING AGENCY BECAUSE NO ALTERNATIVE PRIVATE SECTOR OR GOVERNMENTAL SOURCE CAN EFFICIENTLY SUPPORT THIS FUNCTION.

SWIII is providing the underlying computer infrastructure to support the core business and operational requirements of all Coast Guard units. The replacement of the infrastructure is being performed by purchasing hardware, software and support services through an IDIQ contract which was awarded through full and open competition.

3. SUPPORT WORK PROCESSES THAT HAVE BEEN SIMPLIFIED OR OTHERWISE REDESIGNED TO REDUCE COSTS, IMPROVE EFFECTIVENESS, AND MAKE MAXIMUM USE OF CTOS TECHNOLOGY.

SWIII is a commercial-off-the-shelf (COTS) solution. It is using the current market technology for both hardware and software. The SWIII contract is continually being updated to provide the program offices the current technology to meet their business requirements.

4. DEMONSTRATE A PROJECTED RETURN ON THE INVESTMENT THAT IS CLEARLY EQUAL TO OR BETTER THAN ALTERNATIVE USES OF AVAILABLE PUBLIC RESOURCES. RETURNS MAY INCLUDE; IMPROVED MISSION PERFORMANCE IN ACCORDANCE WITH GPRA MEASURES, REDUCED COST, INCREASED QUALITY, SPEED, OR FLEXIBILITY, AND INCREASED CUSTOMER AND EMPLOYEE SATISFACTION. RETURN SHOULD BE ADJUSTED FOR RISK FACTOR'S SUCH AS THE PROJECT'S TECHNICAL COMPLEXITY, AND THE AGENCY'S MANAGEMENT CAPACITY, THE LIKELIHOOD OF COST OVERRUNS, AND THE CONSEQUENCES OF UNDER-OR NON-PERFORMANCE.

The existing IT infrastructure within the Coast Guard is a proprietary and technical obsolete architecture. The CGSWII (CTOS) systems are difficult and costly to maintain

repairs and replacement equipment is difficult to obtain current trends in IT that would lead to improved program efficiencies, cannot be implemented on the old CGSWII (CTOS) systems. Replacing our infrastructure with a commercial off the shelf system (SWIII), allows us to leverage the technology for improvements in the business processes.

5. BE CONSISTENT WITH FEDERAL, AGENCY, AND BUREAU INFORMATION ARCHITECTURES WHICH INTEGRATE AGENCY WORK PROCESSING AND INFORMATION FLOWS WITH TECHNOLOGY TO ACHIEVE THE AGENCY'S STRATEGIC GOALS; REFLECT THE AGENCY'S TECHNICAL VISION AND YEAR 2000 COMPLIANCE PLAN; AND SPECIFY STANDARDS THAT ENABLE INFORMATION EXCHANGE AND RESOURCE SHARING, WHILE RETAINING FLEXIBILTY IN THE CHOICE OF SUPPLIERS AND IN THE DESIGN OF LOCAL WORK PROCESSES.

SWIII hardware and software underwent extensive acceptance testing to insure that it met the open systems specifications that were required by the RFP. Using COTS hardware and software for the development environment will allow programs to develop their applications in accordance with the coast guard's information system technical architecture. The SWIII technology provides the environment for implementing each program's strategic IT plan and the tools to meet the agency's Year 2000 plan.

6. REDUCE RISK BY: AVOIDING OR ISOLATING CUSTOM-DESIGNED COMPONENTS TO MINIMIZE THE POTENTIAL ADVERSE CONSEQUENCES ON THE OVERALL PROJECT, USING FULLY TESTING PILOTS, SIMULATIONS, OR PROTOTYPE IMPLEMENTATIONS BEFORE GOING TO PRODUCTION, ESTABLISHING CLEAR MEASURES AND ACCOUNTABILITY FOR PROJECT PROGRESS, AND SECURING SUBSTANTIAL INVOLVEMENT AND BUY-IN THROUGHOUT THE PROJECT FROM PROGRAM OFFICIALS WHO WILL USE THE SYSTEM.

The SWIII hardware and software solution is provided by a IDIQ contract that requires all components to be fully integrated. When the vendor submits a technical enhancement, any collateral costs, changes in performance and compatibility issues must be identified in the collateral costs, changes in performance and compatibility issues must be identified in the proposal. The proposal is then tested prior to negotiations the vendor fully integrates any proposed upgrades to the existing baseline configuration. Monthly migration Guidance Team meetings, monthly acquisition reports and semi-annual DOT project briefs are used to keep the senior management informed of the project status.

7. BE IMPLEMENTED IN PHASES, SUCCESSIVE CHUNKS AS NARROW IN SCOPE AND BRIEF IN DURATION AS PRACTICAL, EACH OF WHICH SOLVES SPECIFIC PART OF THE OVERALL MISSION PROGRAM AND DELIVERS A MEASURABLE NET BENEFIT INDEPENDENT OF FUTURE CHUNKS.

Migration of the Coast Guard to SWIII is being conducted in a phased approach. Prior to the Coast Guard-wide rollout, the testing and training sites were migrated. Phase 1 migration began in June 1996 with the migration of Coast Guard Headquarters which was completed in January 1997. The next phase encompasses the migration of the large administrative units which was begun in Q4FY96 and will be completed by Q4FY98. The final phase of migration will be the transition of the field operational units which is scheduled for FY99 - 00.

8. EMPLOY AN ACQUISITION STRATEGY THAT APPROPRIATELY ALLOCATES RISK BETWEEN GOVERNMENT AND CONTRACTOR, EFFECTIVELY USES COMPETITION, TIES CONTRACT PAYMENTS TO ACCOMPLISHMENTS, AND TAKES MAXIMUM ADVANTAGE OF COMMERCIAL TECHNOLOGY.

The SWIII acquisition strategy was to enter the coast guard into the mainstream of technology by awarding an IDIQ contract to a vendor that would include the integration services leveraging the vendor's expertise helps maintain the interoperability of the hardware and software solution from the SWIII contract. The government's risk was also reduced by allowing the purchase of hardware and software from any contract vehicle once the minimum guarantee value of the IDIQ contract was met in FY95.

## 4E. NON-MAJOR IT SYSTEMS (less than $50 million in total life cycle costs).

**INITIATIVE ID:** USCGO008

**ORGANIZATION/ENTITY:** USCG/G-WR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
David Swatloski, (202) 267-2096

**TITLE OF PROGRAM/PROJECT:** U.S. Coast Guard Academy Information System (ACADIS)

**TYPE:** PIM

**DESCRIPTION:** The Academy Information System supports the administrative processing of information on Academy courses, Cadets, Faculty, Staff, facilities, Library and other resources. This system essentially provides information resource management support to all Departments for their IT needs at the Coast Guard Academy. This system attempts to provide the most cost effective mix of hardware and resources to Academy personnel in order to support their essential information needs.

Funds are used for hardware, software, and support services. This system is a networked, client server architecture using ORACLE data base management software. Contract services are used to support the various network and hardware resources, and to develop required software modules.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.635 | $ 1.760 | $ 1.820 | $ 1.820 | $ 1.820 | $ 1.820 | $ 1.820 | $ 1.820 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 14.315

**PERFORMANCE AND SAVINGS:** Potential savings are not directly identifiable to this system as current resource levels have already been streamlined as much as possible. As discussed above, this system provides information support to decision makers in order to allow them to make resource reallocations and reductions throughout the Academy.

**INITIATIVE ID:** USCGO009

**ORGANIZATION/ENTITY:** USCG/Aircraft Repair & Supply Center

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR H. P. Rhoades, (919) 335-6165

**TITLE OF PROGRAM/PROJECT:** Aircraft Repair & Supply Center Aviation Computerized Maintenance System (ACMS)

**TYPE:** PII

**DESCRIPTION:** The Coast Guard maintains a Management Information Services Division at the Aircraft Repair and Supply (ARSC) in Elizabeth City, NC. This facility supports and maintains the Aircraft Computerized Maintenance System (ACMS). This system provides maintenance documentation and configuration management for a fleet of over two hundred Coast Guard aircraft.

ACMS provides full aircraft maintenance tracking, maintenance requirements definition, projections of maintenance due, records of maintenance performed, actual aircraft configuration including part numbers and serial numbers, consumable and hazardous material usage, and allows analysis of maintenance effectiveness. ACMS is the primary tool used by ARSC and all Coast Guard Air Stations to schedule and track aircraft maintenance and document aircraft configuration.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability: always ready as a military service to meet multi-mission requirements.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation related deaths, injuries and property damage.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 3.600 | $ 3.600 | $ 3.600 | $ 3.600 | $ 3.600 | $ 3.600 | $ 3.600 | $ 3.600 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 28.800.

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, ACMS relates to "output performance" versus "outcome performance." The system is used to manage and distribute information necessary to the efficient logistical support of all Coast Guard Aircraft. These aircraft perform the functions associated with the Strategic Goals. These goals include Safety, Protection of Natural Resources, Mobility, Maritime Security and National Defense.

Cost Benefits: ACMS has been fully integrated into the business processes at ARSC and at all Coast Guard air stations. ACMS tracks maintenance activities and configuration on all Coast Guard operational aircraft.

ACMS has allowed increased efficiency in the aviation maintenance workforce and the use of spare parts. This system has improved operational availability fleetwide to target levels while controlling costs. The Reliability Centered Maintenance (RCM) program is only possible through the capabilities of ACMS. The present initiative to consolidate the workforce and reduce billets is a direct benefit of the capability inherent in ACMS. The ability to control aircraft configuration and maintenance standards is a key driver in Coast Guard aviation's excellent safety record.

**INITIATIVE ID:** USCGO010

**ORGANIZATION/ENTITY:** USCG/G-SII

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Harris McGarrah, (202) 267-1324

**TITLE OF PROGRAM/PROJECT:** Automated Information Systems AIS Security Program (AISS)

**TYPE:** PII

**DESCRIPTION:** The AIS Security Program is a Coast Guard-wide program which ensures compliance with the Computer Security Act of 1987, OMB Circular A-130 - Management of Federal Information Resources, and DOT H1350.2 - Department Information Resource Management Manual.

In addition to the DOT policy cited above, the AIS Security Program is needed to ensure appropriate levels of protection for Coast Guard information processed, stored, or transmitted via Coast Guard AISs. This includes all AISs used to support all Coast Guard missions.

This program indirectly supports all business processes which use Coast Guard AISs. The Information Technology required is primarily AIS security services.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED**:

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.289 | $ 1.289 | $ 1.289 | $ 1.289 | $ 1.289 | $ 1.289 | $ 1.289 | $ 1.289 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 10.312

**PERFORMANCE AND SAVINGS:** Savings afforded through a good AIS Security Program are realized through cost avoidance by reducing Coast Guard AISs' vulnerability to harmful threats. Damage resulting from these threats may result in high recovery costs and/or the permanent loss of mission critical data.

**INITIATIVE ID:** USCGO011

**ORGANIZATION/ENTITY:** USCG/Aviation Repair & Supply Center

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR C.W. Ray, (919) 335-6165

**TITLE OF PROGRAM/PROJECT:** Aviation Logistics Management Information System (ALMIS)

**TYPE:** PII

**DESCRIPTION:** ALMIS integrates portions of the Aviation Computerized Maintenance System (ACMS) and the Aviation Maintenance Management Information System (AMMIS/ARSC/MIS). In FY's 96-97, an ALMIS Wide Area Network was implemented to provide bandwidth necessary to consolidate the ACMS and AMMIS data center. ACMS is now collocated with AMMIS at the Aircraft Repair and Supply Center. However, the aircraft supply system (AMMIS) and the aircraft maintenance system (ACMS) are not presently linked. ALMIS will provide the software links to allow coordination of maintenance and supply systems thereby providing more accurate forecast of spares requirements.

ALMIS will provide managers and technicians significant improvement in the information available to steer logistics decision making. Currently the underlying management information system framework for aviation logistics processes is limited to On Line Transaction Processing (OLTP). Under this format each ad-hoc report requires considerable effort (thousands of hours) to construct. The current system's inflexibility is a constraint to timely and efficient logistics decisions. Several redundant paper-based business processes which surround the current information systems can be eliminated. Currently, performing sensitivity analyses of logistics issues is not possible. Gathering the facts to formulate reasonable alternatives is time consuming and often not to the depth required to mitigate the risk and cost of suboptimal decisions.

The ALMIS project infuses current technology to allow end users on-line data entry capability providing easy access to effect cost effective business decisions. The tighter integration of system design will result in "source of data entry" thereby reducing errors caused by redundant entry while concurrently reducing personnel costs. The resulting integrated logistics system will allow a single maintenance entry to initiate the required supply actions. The effort streamlines the data entry process while facilitating access to a management level information through a Decision Support System (DSS).

Managers will be able to graphically depict trends while changing parameters to support sensitivity analyses. The task of providing information for resolution of complex problems will become routine because of the ease in processing and presenting information. Fast response to unexpected issues will no longer require special consultants and programming

staffs. User interface tools will lessen the need for data analysts to write small programs each time a manager requests an ad-hoc report.

By providing simplified access to existing databases, all levels in the chain of command can share crucial information. Commanding Officers will have on-demand visibility of operational utilization, levels of effort and mission status. The ability to share logistical data will lead to increased efficiency throughout the infrastructure. Improved data accuracy and visibility of trends will permit further reductions in the aviation spare parts inventory.

The hardware for ACMS and AMMIS are DEC workstations. The software for ACMS and AMMIS is Ingres RDBMS: COTS and developed code. ALMIS integration will involve the 26 aviation units, support facilities and contractors.

AC&I funds have been allocated for FY95, FY96, FY97 and are forecasted to be approved under FY98.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability: always ready as a military service to meet multi-mission requirements.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation related deaths, injuries and property damage.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Business Area Analysis (BAA) kick-off 2/97.
- Milestone 2: Prototype ALMIS Integration Project 9/97.
- Milestone 3: Logistics Enhancement Project 9/97
- Milestone 4: BAA final report 11/97.

**PROJECT STATUS:** BAA nearing completion, Prototype development efforts underway, Reengineering for integration underway.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.666 | $ 7.635 | $ 2.235 | $ .485 | $ .138 | $ .138 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 12.300

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, ALMIS relates to "output performance" versus "outcome performance." ALMIS will become the premium Government of the Shelf System (GOTS) for a completely integrated system for the logistical management of aviation assets. These aviation assets perform the functions associated with the Strategic Goals. These goals include Safety, Protection of Natural Resources, Mobility, Maritime Security and National Defense.

Cost Benefit: Enlisted billet reductions: $4.92 Million; Reliability Centered Maintenance Enhancements: $9.00 Million; Programmer support cost reduction: $5.47 million; Maintenance Facility productivity enhancement: $5.46 million; Life-cycle inventory reductions: $6.5 Million; Life-cycle carrying cost reduction: $6.24 Million. Projected Benefit/Cost Ratio of 2.04.

**INITIATIVE ID:** USCGO012

**ORGANIZATION/ENTITY:** USCG/Aircraft Repair & Supply Center

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR H. P. Rhoades, (919) 335-6165

**TITLE OF PROGRAM/PROJECT:** Aircraft Repair & Supply Center Aviation Maintenance Management Information System (AMMIS)

**TYPE:** PII

**DESCRIPTION:** The Coast Guard maintains a Management Information Services Division at the Aircraft Repair and Supply (ARSC) in Elizabeth City, NC. This facility supports and maintains the Aviation Maintenance Management Information System (AMMIS). This system provides total logistical support for all Coast Guard Aviation.

AMMIS provides requisitioning, wholesale and retail inventory management, procurement, fiscal accounting, disbursing, warehousing, shipping, receiving, aircraft flight and operations tracking, pilot and aircrew training and qualification tracking, and flight pay reporting. AMMIS is the primary inventory management tool used by ARSC and all Coast Guard Air Stations. AMMIS data is accessed by Districts, Areas and CGHQ.

AMMIS supports all of Coast Guard aviation. All logistical functions for Coast Guard aviation are handled through ARSC. AMMIS allows air stations to readily requisition material to meet operational commitments. ARSC is able to track the location of parts and to determine the appropriate quantity of material to retain in inventory and to procure. Total Asset Visibility (TAV) is achieved through an integrated relational database which shows location of all Coast Guard owned aviation spare parts whether at ARSC or at the various air stations. Real-time fiscal accounting is achieved through a relational database which requires single-point entry to create a financial transaction. Industrial accounting for the ARSC workforce is tracked and used to compute actual aircraft support costs through a workorder system. AMMIS also tracks aviation operational data including resource and employment hours for input to the Abstract of Operations. Certifications of flight pay are calculated from this data. The system also tracks training and qualification of aviation personnel. This operational data, combined with logistical data, allows managers to analyze the impact of logistics on operations and the reverse.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.

- GOAL 4: Maintain a strong response capability: always ready as a military service to meet multi-mission requirements.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation related deaths, injuries and property damage.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 3.026 | $ 3.026 | $ 3.026 | $ 3.026 | $ 3.026 | $ 3.026 | $ 3.026 | $ 3.026 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 24.208

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, AMMIS relates to "output performance" versus "outcome performance." The system is used to manage and distribute information necessary to the efficient logistical support of all Coast Guard Aircraft. These aircraft perform the functions associated with the Strategic Goals. These goals include Safety, Protection of Natural Resources, Mobility, Maritime Security and National Defense.

Cost Benefits: AMMIS has been fully integrated into the business processes at ARSC and at all Coast Guard air stations. AMMIS is the primary tool used to manage: (1) aviation spare parts inventory valued at $650 million, (2) ARSC's financial system with over $150 million of annual expenses, and (3) Coast Guard aircraft operations. ACMS tracks maintenance activities and configuration on all Coast Guard operational aircraft.

AMMIS has provided the asset visibility and management oversight to allow reduction of over $150 million in aviation spares. Further refinement of the AMMIS models will

continue. This system is the primary vehicle to further reduce the cost of ownership for Coast Guard aircraft.

**INITIATIVE ID:** USCGO013

**ORGANIZATION/ENTITY:** USCG/G-OCC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE #):**
LCDR Steven H. White (202) 267-1054

**TITLE OF PROGRAM/PROJECT:** Automated Mutual-Assistance Vessel Rescue II (AMVER II) system

**TYPE:** PIM, PDA, AIM, ASS

**DESCRIPTION:** AMVER II is an existing operational information system. It is a mission essential application that tracks and maintains position plots on merchant vessels on the high seas. AMVER II enables the rapid identification of non-government resources that may be called upon to respond to SAR incidents. The AMVER II System user base is comprised of the 12 Coast Guard Command Centers located at Area and District Offices. The AMVER II participant base includes: ~14 participating nations, ~12,000 AMVER Vessel population and approximately 2,700 commercial vessels daily on real-time plot.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

**MILESTONES 1, 2, 3 & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 2.127 | $ 2.127 | $ 2.127 | $ 2.127 | $ 2.127 | $ 2.127 | $ 2.127 | $ 2.127 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 17.016

**PERFORMANCE AND SAVINGS:** AMVER II is currently in steady state operations

and maintenance (i.e., system software/hardware architectures and production processes). The AMVER Program Manager continues to incorporate modest system enhancements and technology refreshments that may yield modest returns. These activities are primarily focused at maintaining currency in state-of-the-art computing technologies to avoid technology obsolescence. There are no significant initiative(s) currently on schedule or planned that will deliver significant change in AMVER II.

The specific information technologies and system enhancements that are applicable in this initiative include: **(1)** AMVER II end-user software conversion for operability on the Coast Guard standard desktop computing platforms (SWIII); **(2)** AMVER II SURface PICture (SURPIC) product upgrade to 32 bit functionality with Geographic User Interface. The current AMVER II production process is operated at the Coast Guard Operations Systems Center in Martinsburg, WV. All plans, approaches and project development actions are consistent with COMDTINST 5230.41, 5230.45 and 5230.49.

**INITIATIVE ID:** USCGO014

**ORGANIZATION/ENTITY:** USCG/G-SL

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR James Monaghan, (202) 267-0443

**TITLE OF PROGRAM/PROJECT:** Automated Requisitioning Management System (ARMS)

**TYPE:** PIM

**DESCRIPTION:** The Automated Requisition Management System is the Coast Guard's centralized requisition management system. This system processes all Coast Guard unit level Federal Stock System Transactions.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .255 | $ .318 | $ .300 | $ .300 | $ .300 | $ .300 | $ .300 | $ .300 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.373

**PERFORMANCE AND SAVINGS:** This application allows the Coast Guard to effectively meet each of the Strategic Goals by providing positive management and visibility of its approximately $75 million in obligations, generated by approximately 500,000 National Stock System requisitions.

**INITIATIVE ID:** USCGO015

**ORGANIZATION/ENTITY:** USCG, Aircraft Repair and Supply Center

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Fred Hunter, (919) 335-6009

**TITLE OF PROGRAM/PROJECT:** Aviation Technical Information Management System (ATIMS)

**TYPE:** PII

**DESCRIPTION:** The central work effort of the ATIMS project is converting CG aircraft technical paper manuals to electronic format. This project will allow all engineering and support personnel to manage, access, and use technical information in a timely manner with accurate, up-to-date data. All Commandant (G-SEA) cognizant publications will be translated to a Standardized General Markup Language (SGML) that complies with existing Continuous Acquisition and Life-Cycle Support (CALS) DOD specifications for Interactive Electronic Technical Manuals (IETMS). One data source (SGML) will be capable of taking many forms of delivery: CD-ROM Technical Manuals (TMs) or hard-copy Maintenance Procedure Card (MPC) derivatives. The plan for all aircraft includes digital conversion of approximately 2,751 TMs containing approximately 1,216,817 pages to a digital format. Digital manual conversion has commenced with the HH-65A related publications and will continue with the HU-25 (series), both non-DOD supported aircraft. The DOD supported aircraft, the HC-130H and the HH-60J, manual conversion will follow respectively. The order of manual conversions, non-DOD then DOD supported aircraft, were chosen deliberately to allow for technological innovation to reach maturity concurrently between the Coast Guard and DOD. Since many of DOD's digital TMs are still under development, the ATIMS project manager will pursue opportunities to combine resources with DOD to form a synergistic relationship. By closely tying developmental strategies together, the ATIMS goal is Coast Guard/DOD compatible TM updates which will significantly increase the value of digital manuals.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability: always ready as a military service to meet multi-mission requirements.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Feasibility Study completed and approved 2/94.

- Milestone 2: Rapid application development, hardware distribution and prototyping: completed proof of concept (01/97).

- Milestone 3: First full distribution of ATIMS beta version software scheduled for 12/97.

- Milestone 4: Completion of conversion process for all aircraft scheduled for 12/99.

**PROJECT STATUS:** Prototyping/Limited Production. HH-65A manuals 85% complete, HU-25 in development, HH-60J O-Level manuals will be released Sep/97 and HC-130H will be completed Dec/98.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .578 | $ 1.659 | $ .789 | $ .254 | $ .254 | $ .254 | $ .254 | $ .254 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 4.296

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, ATIMS relates to "output performance versus outcome performance". ATIMS will enable the Coast Guard's 197 aircraft to perform the functions associated with the Strategic Goals of the draft FY99 Coast Guard Performance Plan. These goals include safety, protection of natural resources, mobility, maritime security, and national defense.

Cost Benefits: The replacement of paper TM's with CD-ROM digital manuals at the field level will increase productivity at all levels of technical manual utilization and maintenance.

CD-ROM reader software will provide technicians a tool which delivers nearly instant access to the information they require. This technical data will be much more efficiently maintained and distributed than ever before possible. Technicians will be able to search much more quickly through large quantities of technical information drastically reducing a technical inquiry of 15 to 30 minutes to less than five minutes. Units will be able to eliminate over 2,000 paper manuals along with the high number of man-hours required to maintain them. On average, the typical unit devotes approximately 0.5 man years of effort to maintain the current paper-based technical library for just one type of aircraft, some units have three types. These part-time librarians can return to full-time aircraft mechanic functions. The Technical Publications section at ARSC currently spends in excess of $1.5M annually to maintain and support the existing paper based TMs. A U.S. Coast Guard Study of CD-ROM Costs vs. Benefits for publishing and distributing Coast Guard Directives and Publications conducted in 1992 for then COMDT (G-TPS) indicated that substantial savings could be achieved by converting to CD-ROM. The cost/benefit analysis submitted with the ATIMS DPA request in 1996 estimated that for every one dollar spent on CD-ROM distribution, the same data in paper format would cost the government $8.70.

**INITIATIVE ID:** USCGO016

**ORGANIZATION/ENTITY:** USCG/G-OCX

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
William C. Sweeney, (202) 267-2370

**TITLE OF PROGRAM/PROJECT:** Auxiliary Management Information System II (AUXMIS II)

**TYPE:** PIM

**DESCRIPTION:** AUXMIS II is the management information system designed to supply the U.S. Coast Guard Auxiliary information needed to be a fully functional member of Team Coast Guard. Data entry to AUXMIS II is the responsibility of the Auxiliary. AUXMIS II software and hardware are the property of the U.S. Coast Guard which supplies the funds necessary for maintenance and support of the system.

**OA/OST GOALS SUPPORTED:**

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential.

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements

- GOAL 5: Enhance and extend our reputation as world's premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and flexibility of choices.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

1. January 15, 1997 Place AUXMIS II on-line
2. Late Summer 1997 Baseline system
3. Early Fall 1997 contractor accepts AUXMIS II
4. Second Quarter 1998 Hardware and software conversion for FY2000
5. First Quarter 1999 begin development AUXMIS III
6. First Quarter 2000 full conversion to AUXMIS III

**PROJECT STATUS:** Prototyping/Limited Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .177 | $ .470 | $ .290 | $ .350 | $ .240 | $ .255 | $ .255 | $ .255 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.695

**PERFORMANCE AND SAVINGS:** AUXMIS II should reach its full operational level in 1998. AUXMIS II will save the U.S. Coast Guard money by saving expenditures on paper, printing, postage, and travel costs. AUXMIS II is a basic stop gap measure to supply the Auxiliary a management tool while a fully capable system can be developed. AUXMIS II's follow on system, AUXMIS III, will be the Auxiliary's state-of-the-art Management Information System provider. AUXMIS II will provide the theory, logic, and functional background needed to design and build AUXMIS III.

**INITIATIVE ID:** USCGO017

**ORGANIZATION/ENTITY:** USCG/G-OCC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE #):**
LCDR Steven H. White, (202) 267-1054

**TITLE OF PROGRAM/PROJECT:** Computer Assisted Search Planning I (CASP I) system

**TYPE:** PIM, PDA, AIM, ASS

**DESCRIPTION:** CASP I is an existing operational decision support system. It is a Mission Essential application that predicts the position of search targets on the high seas. CASP I enables the rapid identification of high probability search cells wherein targets may be detected. CASP I recommends optimal search patterns and the appropriate search platform to execute the mission. The CASP I System user base is comprised of the 12 USCG Command Centers located at Area and District Offices.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

**MILESTONES 1, 2, 3 & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .334 | $ .334 | $ .334 | $ .334 | $ .334 | $ .334 | $ .334 | $ .334 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.672

**PERFORMANCE AND SAVINGS:** CASP I is currently in steady state operations and maintenance (i.e., system software/hardware architectures and production processes). The

CASP I Program Manager continues to incorporate modest system enhancements and technology refreshments that may yield modest returns. These activities are primarily focused at maintaining currency in state-of-the-art computing technologies to avoid technology obsolescence. There are no significant initiative(s) currently on schedule or planned that will deliver significant change in CASP I.

The specific information technologies and system enhancements that are applicable in this initiative include: **(1)** CASP I end-user software conversion for operability on Coast Guard standard desktop computing platforms (CGSWIII); **(2)** CASP I probability solution product set upgrade to 32 bit functionality with Geographic User Interface; **(3)** CASP I environmental file improvements for higher degree in accuracy. The current CASP I production process is operated at the Coast Guard Operations Systems Center in Martinsburg, WV. All plans, approaches and project development actions are consistent with Commandant Instruction (COMDTINST) 5230.41, 5230.45 and 5230.49.

**INITIATIVE ID** USCGO018

**ORGANIZATION ENTITY:** USCG/G-SEC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR E. Sikorsky, (202)267-6141

**TITLE OF PROGRAM/PROJECT:** Civil Engineering Data System (CEDS)

**TYPE:** PIM

**DESCRIPTION:** The Civil Engineering Data System (CEDS) provides planning, budgeting and execution management of AFC-43 (Shore Unit Maintenance), Acquisition, Construction and Improvement (AC&I), and Environmental Compliance and Restoration (EC&R) appropriation funded projects. It also provides for real property management of all shore facilities as well as helps the Civil Engineering (CE) Program manage the environmental compliance status of shore facilities. CEDS enables the CE Program to function as the Coast Guard's Shore Facilities Manager.

CEDS software is a Mission Essential Application (MEA) and is currently in process of being re-coded to run on SWSIII; note that conversion costs are not included herein but instead are assigned separately.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

- NATIONAL SECURITY: Advance the nations' vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our

borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .133 | $ .200 | $ .285 | $ .275 | $ .255 | $ .185 | $ .265 | $ .275 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.740

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act (GPRA), CEDS relates to "output performance" vice "outcome performance". The Civil Engineering program will continue to invest approximately $50K and 3 FTE annually to administer CEDS. The return on this investment is effectiveness and efficiency of the Civil Engineering (CE) Program in serving as the Shore Facilities Manager for the Coast Guard. To succeed in the current decremental budget environment, the CE Program must capitalize on the benefits of this technology. To deliver the same level of services that our customers demand, we must achieve productivity gains that match our resource losses. CEDS will continue to enable the CE Program to increase management efficiencies by: (1) allowing the user to access most current information; (2) reducing the amount of time required to process and distribute management information; (3) greatly reduce the need for paper management records; and (4) allowing existing resources to spend more time performing critical tasks.

**INITIATIVE ID:** USCGO019

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Eugene Vogt, (202) 267-1348

**TITLE OF PROGRAM/PROJECT:** Coast Guard Data Network (CGDN)

**TYPE:** PII

**DESCRIPTION:** The Coast Guard contracts with Wang Government Systems (formerly I-Net, Inc.) for operations and maintenance of the Coast Guard Data Network (CGDN). The CGDN extends X.25 network access to units throughout the Coast Guard, providing the primary data communications medium for existing CGSWII system applications through a combination of leased lines, dial-up modems and Coast Guard owned equipment.

As the CGDN was originally planned as a replacement for the district's record message system (DISTNET), connections were initially provided only to those units previously connected to DISTNET. CGDN provides writer-to-reader connectivity Coast Guard-wide between CGSWII platforms, and via gateways, to SWSIII and the CGDN+. Planning has begun for expanding network connectivity to all major cutters in port. This improvement will provide access to record message communications, electronic mail, and all applications, present and future, designed to run on the CGDN.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world’s premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Extend CGDN to all major cutters during FY98. Projected 8/98.

- Milestone 2: Discontinue service to commands that are migrated to the SWIII. (Schedule driven by the roll out of SWIII)

**PROJECT STATUS:** System Maintenance and System Deployment. From FY97 to FY00, 2% annual cost increase due to inflation is projected. Significant savings are projected from the closure of the CGDN beyond FY00 due to completion of migration to CGDN+ from CGDN.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.938 | $ 1.650 | $ 1.370 | $ 1.020 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 5.978

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, CGDN services relate to both "output performance" and "outcome performance." CGDN services ensure the Coast Guard makes effective use of contracted operations and maintenance support for telecommunications infrastructure. CGDN support contracts provides continuous network management, minimizing the requirements for Coast Guard dedicated staff. CGDN services are used to manage and distribute the formal message traffic and other information necessary to operate and maintain the various Coast Guard operational platforms that perform the functions associated with the Strategic Goals of the draft FY99 Coast Guard Performance Plan. These goals include Safety, Protection of Natural Resources, Mobility. Maritime Security and National Defense.

**Cost Benefits**

Tangible:

The Coast Guard achieves significant cost avoidance over operating, maintaining and managing these services on its own. This is accomplished by using a dedicated contractor with expertise in the area of operating and maintaining a nationwide X.25 telecommunications network and infrastructure.

Intangible:

Increase management efficiencies by:

- continuous network management, standardized with other agencies.
- consistent infrastructure with other agencies.
- reducing the amount of staff & time required to manage network.

**INITIATIVE ID:** USCGO020

**ORGANIZATION/ENTITY:** USCG/G-OCI

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR Pat Nemeth, (202) 267-2132

**TITLE OF PROGRAM/PROJECT:** Coast Guard Intelligence Support System (CGISS)

**TYPE:** PIM

**DESCRIPTION:** CGISS is a network of desktop computers that interconnects all Coast Guard Intelligence sites and provides connectivity and interoperability with Coast Guard $C^2$ programs, DOD systems, Intelligence Community systems, and to the extent practicable, Law Enforcement Agencies. The mission of CGISS is to provide a robust, dynamic and flexible system of networks, communications, hardware, software, and peripheral devices which assist and support intelligence personnel in carrying out the strategic objectives and business plan of the U.S. Coast Guard Intelligence program at all classification levels. The strategic goals of the CGISS initiative are to place a CGISS workstation on every Intelligence Program desk, including managers, analysts, watchstanders, and admin support personnel; and to provide a single workstation capable of running all required applications at every level of classification from unclassified through SCI.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and extend our reputation as the world's premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Deployment and System Maintenance.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 0 | $ .247 | $ .247 | $ .247 | $ .247 | $ .247 | $ .247 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.482. Acquisition, Development, Implementation, and most maintenance, has been, and will continue to be funded through the Department of Defense (DOD) General Defense Intelligence Program (GDIP) and is not part of the Coast Guard budget process. The total life cycle cost is $2.476 million over the FY94-FY99 period. GDIP funding (in thousands) is $496 (FY97), $1,054 (FY98), and approximately $2000 thereafter. The project costs listed above pertain an FY99 RCP initiative to add 4 Coast Guard maintenance personnel. No other Coast Guard funds were provided. Additionally, previous costs associated with this initiative included SIPRNET circuit costs. Management for that circuit is now a shared expense between several programs and the funding has been transferred to TISCOM's base.

**PERFORMANCE AND SAVINGS:** CGISS is the necessary ADP/IT backbone for the Coast Guard Intelligence Program to provide connectivity and interoperability within the Coast Guard, with members of the Intelligence Community, and with federal law enforcement agencies. While of primary benefit to the Intelligence Program, mission areas directly benefiting from CGISS include Enforcement of Laws and Treaties, Marine Environmental Protection, Defense Operations, and Marine Safety. Providing a fully operational CGISS system will allow collection, fusion, analysis, production, and dissemination of tailored intelligence support to Coast Guard operational forces involved in all mission areas.

The CGISS project provides standard architecture and support to all ADP/IT systems, networks, and applications used by Coast Guard intelligence sites, including, ADNET, JDISS, CASTER, NTRS, GATCHWORK, ADVICE, and JEAP/GALE, SIPRNET, JWICS, and Intelink. G-OCI is working closely with the emerging Command, Control, Communications, Computers and Intelligence ($C^4I$) effort. Since there are many areas of common interest -(common workstations, secret operating environment, common

networks) - there may be an ability to tie some of these support efforts together at those locations where both programs exist.

**INITIATIVE ID:** USCGO021

**ORGANIZATION/ENTITY:** USCG/G-SCC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Jon Bechtle, (202) 267-1247

**TITLE OF PROGRAM/PROJECT:** Coast Guard Software Application Conversion (CGSWAP)

**TYPE:** PSS

**DESCRIPTION:** This effort will convert Coast Guard developed Mission Essential software applications from the proprietary Coast Guard Standard Workstation II (CGSWII) environment to a Federal standards based Open Systems Environment available through the 1995 award of the Standard Workstation III (SWIII) contract.

In recent history, the Coast Guard has developed several hundred service-wide, specialized applications running on the present Coast Guard Standard Workstation (CGSWII). Federal mandates require the Coast Guard to move to the Open Systems Environment (OSE) for the replacement Standard Workstation (SWIII) contract. Of the 212 applications currently identified to operate in the CGSWII environment, 22 were considered Mission Essential Applications (MEA) and must be converted to the SWIII OSE. Note that one MEA was streamlined and transferred to another agency. Each of the remaining 21 MEAs are considered high priority, unique to Coast Guard operations and not available from commercial or other government sources, and must be reprogrammed to be in compliance with the Application Portability Profiles (APP) of the National Institute of Standards and Technology (NIST).

The conversion effort entails reprogramming of designated MEAs to take advantage of state-of-the-market technologies and software engineering practices. All MEAs will undergo a rigorous analysis process to determine and document underlying business practices with the goal of identifying shared data elements, business processes and rules. Development of MEAs to a common platform, SQL based Relational Database Systems, standards based software architectures and standard documentation sets under this centrally managed effort will facilitate the sharing of data and information between applications. The ability to share information and eventual elimination of “stovepipe” applications is at the heart of the Coast Guard’s Strategic Information Resource Management Plan goals.

The software conversion effort will maximize the use of Commercial Off-the-Shelf (COTS) products available on the SWIII contract. The SWIII contract offers the Coast Guard the ability to migrate, and standardize on, state of the industry, commercially available products and services that include the Microsoft Windows NT operating system,

Microsoft Office Suite, Informix multi-user relational database and Powersoft's Powerbuilder development environment. Hardware consists of Intel based Pentium CPUs.

Conversion services will be provided by a mix of in-house resources, existing government wide contracts and award of 8a set-aside contracts. All conversion efforts well be closely monitored to ensure appropriate software development life-cycle methodologies are applied to MEA conversions, and that applications are fully documented and tested prior to government acceptance. The bulk of AC&I funds available to the project will be applied to these contracts as well as Independent Verification and Validation (IV&V) services.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security.
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Software Conversion Study 12/94
- Award of SWIII Contract 6/95
- First Software Conversion Contract 5/96
- Software Conversion Complete 1st Qtr FY99

**PROJECT STATUS:** Full Scale Production.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 6.512 | $ 2.512 | $ .512 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 9.536

**PERFORMANCE AND SAVINGS:** Implementation of standard architectures, user interfaces, data element and system documentation will provide a significant strategic advantage as the Coast Guard migrates into this new OSE. The potential for business logic and software reuse as well as shared data and information between applications will result in the Coast Guard's ability to significantly leverage this investment.

The General Services Administration (GSA) limits workstation contracts to three to five years, including SWIII, which has a maximum contract life of five years. The goal is to convert MEAs so that they will not only run on SWIII, but also reduce potential conversion costs to future platforms. Conversion of applications to a Federal standard-based OSE should greatly improve their inherent portability, and interoperability, and avoid large out year conversion costs on information technology acquisitions.

**INITIATIVE ID:** USCGO022

**ORGANIZATION/ENTITY:** USCG/G-SCC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Patricia Thompson, (202) 267-1323

**TITLE OF PROGRAM/PROJECT:** Coast Guard Standard Workstation II (CGSWII)

**TYPE:** PSS

**DESCRIPTION:** The CGSWII project provides continued support and maintenance for the Coast Guard's legacy microcomputer infrastructure. This infrastructure is being replaced by the major IT project, Standard Workstation III (SWIII), which is addressed as a separate project. The CGSWII is a Unisys hardware system running the Convergent Technologies Operating System (CTOS). The Central Processing Units (CPUs) used are Intel 186, 286 or 386 microprocessor chips. The hard disk capacities range from 10 - 540 Megabytes (MB). The entire Unisys hardware/software environment is proprietary.

The legacy CGSWII systems run CTOS 3.3.8, a proprietary operating system (OS) with embedded network functionality. The standard office automation suite consists of word processing, database , spreadsheet, graphics and E-mail software. The CG has developed a suite of mission essential applications to support its operational and administrative information needs which run on the CGSWII systems. This application software is being converted to run in the new SWIII environment.

Funding for the CGSWII project will steadily decline as the SWIII migration proceeds. No new software or applications are being acquired or developed for this system. The CGSWII infrastructure continues to provide e-mail and office automation applications for Coast Guard field units who have not yet been migrated to SWIII. In FY95, the CG initiated an "in house" CGSWII maintenance program. As CGSWII systems are replaced by SWIIIs, they will be used to supplement the in house maintenance pipeline, or redistributed to meet requirements. The in house maintenance program resulted in significant savings the Coast Guard. These savings are being reprogrammed to supplement the SWIII replacement project.

Funding covers repair and redistribution of CGSWII systems as well as personnel support.

The CGSWII contract expired in July 1996. Personnel support for FY97 through FY00 will be procured from the Dept. of Justice Assist contract. The need for CGSWII personnel is decreasing as SWIII systems replace the CGSWII base.

**OA/OST GOALS SUPPORTED:**

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential.

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

- HUMAN AND NATURAL RESOURCES: Protect and enhance communities and the natural environment affected by transportation

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Coast Guard in-house CGSWII support began 10/95

- Milestone 2: CGSWII contract for hardware/software/support expired 7/96

- Milestone 3: Migration/replacement of CGSWII systems by SWIII system began 8/96

- Milestone 4: Total replacement of CGSWII systems and termination of project 12/00

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 6.200 | $ 1.000 | $ 1.000 | $ .800 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 9.000

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, the CGSWII system relates to "output performance" versus "outcome performance". The CGSWII project maintains the legacy microcomputing environment used to support the administrative and operational information needs of the Coast Guard. As such, this infrastructure runs those systems which directly support the Coast Guard functions and missions associated with the Strategic Goals of the draft FY99 Coast Guard Performance Plan. These goals include Safety, Protection of Natural Resources, Mobility, and Maritime Security.

Cost Benefits - :

1. Coast Guard's in-house maintenance of CGSWII hardware resulted in cost savings of $7M in its first year of operation (FY95). These savings have been reinvested in the SWIII project to replace this outdated infrastructure by the end of 2000.

2. The phased replacement of the CGSWIIs systems enables the Coast Guard to make the best use of its available IT funds, and continue to provide reliable office automation and business information processing to all units throughout the transition.

**INITIATIVE ID:** USCGO023

**ORGANIZATION/ENTITY:** USCG/G-WR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
David Swatloski, (202) 267-2096

**TITLE OF PROGRAM/PROJECT:** Civilian Personnel Information Management System (CIVPMIS), Civilian Unified Pay System (CUPS), Integrated Pay and Personnel System (IPPS)

**TYPE:** PIM

**DESCRIPTION:** This system is used by the Department of Transportation for all DOT modes for civilian personnel and payroll. These costs represent transfers to DOT for the Coast Guard's share of operating these systems.

The system is used to pay and track civilian employees of the Coast Guard and allows for continued operations.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.390 | $ 1.594 | $ 1.594 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

FY99 and beyond are estimates of charges from DOT.

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 4.578. Contact DOT/OST for this information if available. Coast Guard is a fee for service user of this system.. The above cost represent reimbursement to DOT for system use.

**PERFORMANCE AND SAVINGS:** N/A.

**INITIATIVE ID:** USCGO024

**ORGANIZATION/ENTITY:** USCG/G-SL

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR James Monaghan, (202) 267-0443

**TITLE OF PROGRAM/PROJECT:** Configuration Management Plus (CMplus)

**TYPE:** PIM

**DESCRIPTION:** CMplus is a unit-level system that links a unit's physical configuration information to related supply, maintenance and technical information. The unit will manage its configuration data, schedule and record completion of preventive and corrective maintenance, maintain allowance and inventory information, requisition material and maintain technical data indices including selected record drawings, technical publications and Ship Alteration (ShipAlt) data. CMplus operates on the Coast Guard Standard Workstation II and is scheduled to migrate to SWIII. CMplus is targeted for six major cutter classes, all new vessel acquisitions and all standard boats.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- NATIONAL SECURITY: Advance the nation’s vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Deployment and System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 2.579 | $ 3.101 | $ 2.901 | $ 2.032 | $ 2.032 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 12.645

**PERFORMANCE AND SAVINGS:** This application allows the Coast Guard to effectively meet each of the 5 Strategic Goals by providing positive configuration and maintenance management of the vessels of the six major cutter classes 110' in length or greater. Additionally, effective, positive management of its approximately $175 million worth of Operating Materials and Supplies staged on afloat units

**INITIATIVE ID:** USCGO025

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT:**
LT Eugene Vogt, (202) 267-1348

**TITLE OF PROGRAM/PROJECT:** Communication System 2000 (CS2K)

**TYPE:** PCS

**DESCRIPTION:** COMMSYS 2000 is a multiyear (1996-2000), phased project to consolidate the Coast Guard Communication System (COMMSYS). The project will focus on remoting the operation of HF/MF Communication Stations (COMMSTAs). COMMSTA consolidation establishes a high availability network linking remote radio transmit and receive sites to two Communication Area Master Stations (CAMS). The Coast Guard Communication Station Control System (CCS) hardware and applications software will be upgraded to simultaneously control transmitter and receiver assets at all remote sites. This initiative is strategically planned to link with other IT initiatives to result in effective use of resources. The CS2K project uses SWIII for computer hardware and FTS2000 and post-FTS2000 contracts for network services and microwave systems.

COMMSYS 2000 will consolidate operations at radio stations and reduce staffing at labor intensive message processing centers, eliminating over 100 Full Time Permanent (FTP) positions by 2000. Use of standards based products will enable continuous improvements.

COMMSYS services support a wide variety of operational and administrative functions of the Coast Guard, as well as significant national and international maritime users. With such a wide area of impact, a consolidated COMMSYS is the most cost-effective for 24-hour, continuous use. These services are an essential component of the Coast Guard's telecommunications infrastructure and, ultimately, support all mission areas and business processes. This project provides a consolidated communication system for efficient administration by a small Coast Guard staff.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.
- GOAL 5: Enhance and expand our reputation as the world’s premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3 & 4 AND DATES:**

- Finalize Network Architecture Apr 95
- FY 96 AC&I Funding Oct 95
- COMMSTA Boston Remoted Nov 96
- COMMSTA Honolulu Remoted Jul 97
- Facility Expansions Completed Oct 97
- Stage 1 Control System Upgrades Completed Mar 98
- COMMSTA New Orleans Remoted Jul 98
- COMMSTA Kodiak Technology Improvements Apr 99

**PROJECT STATUS:** System Deployment - 60% deployed.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| $ 4.734 | $ 1.615 | $ 1.663 | $ 1.000 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 9.012

**PERFORMANCE AND SAVINGS**: The CS2K project has streamlined significant portions of the COMMSYS already. Currently, 102 billets have been returned as Budget Category 1 savings. Streamlined, remote operations have been successfully proven at COMMSTAs Boston, Miami, and Honolulu. In FY98 COMMSTA New Orleans will be remoted, followed by improvements at COMMSTA Kodiak. The project is on schedule and budget, delivering anticipated savings and benefits. The COMMSYS 2000 Master Plan is being revised to account for the changes required to support the unique needs of the Alaska area of operations. Projections submitted in a FY99 budget request remains current, and significant future savings through this project are projected to be realized (24 more billets saving estimated).

This initiative improves business practices, the telecommunications infrastructure, eliminates unnecessary facilities, and reduces the Full Time Equivalent (FTE) billets required to operate long-range radio stations by using high-speed networking and computing technology to streamline. Under the Government Performance and Results Act, CS2K relates to both "output performance" and "outcome performance." The CS2K project ensures the Coast Guard makes maximum use of the lowest cost competed government contract for telecommunications infrastructure. The project provides for continuous 24/7 radio communications for Coast Guard Command & Control including secure voice and data channels to boats, cutters and aircraft.

The CS2K project also provides communications needed to meet international treaty obligations under the Safety Of Life At Sea (SOLAS) Global Maritime Distress And Safety System. Public information services including navigation and weather services are provided by the COMMSYS, with streamlined staff post - CS2K. This minimizes the requirements for Coast Guard dedicated staff, saving over 100 FTE billets. COMMSYS services are used to manage and distribute the formal message traffic and other information necessary to safe operation of the various public, mercantile and Coast Guard vessels and operational platforms.

**Cost Benefits**

Tangible:

The Coast Guard achieves significant cost savings by reducing the billet structure needed to provide the services required. The CS2K project has been cited by the Commandant as a prime example of using technology to leverage resources, streamline and continue providing needed services at equal or enhanced levels.

Intangible:

Increase management efficiencies by:

- Centralized COMMSYS management, full access to all units.
- Consistent infrastructure and operational control.
- Reducing the amount of staff & time required to manage COMMSYS.
- Reduced risk by elimination of critical nodes, flexible control.
- Fully redundant control of station equipment by both Master Stations.
- Ability for each Master Station to provide back up for the other.

**INITIATIVE ID:** USCGO026

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Eugene Vogt, (202) 267-1348

**TITLE OF PROGRAM/PROJECT:** District Seventeen VHF-FM High-Level Site Upgrade Phase III (D17 VHF-FM)

**TYPE:** PCS

**DESCRIPTION:** The D17 VHF-FM project refurbishes the short-range VHF-FM communications system in the Alaska Search and Rescue (SAR) area of responsibility. The communication sites in Alaska have deteriorated to the point where the system no longer provides reliable distress or communications capabilities. The potential safety hazard posed by the severely degraded system requires immediate repair and upgrade. The sites are part of the VHF National Distress System (NDS) and are an essential component of the Coast Guard's telecommunications infrastructure. The project provides improvements to Search and Rescue and Command and Control ($C^2$) communications, as well as the infrastructure needed to maintain this vital communication capability into the future in the severe Alaska environment.

The D17 VHF-FM project repairs and upgrades the short range VHF-FM communications system in Alaska, improving system reliability. Improved system reliability should provide the following benefits: reduce system downtime, save resources expended on maintenance and repair, and, most importantly, improve our ability to perform our missions and meet the needs of our maritime customers. As a result, the Coast Guard should have the ability to more effectively perform its missions such as Search and Rescue and meet the needs of its maritime customers, especially critical in the harsh Alaskan maritime environment. These sites are part of the VHF National Distress System (NDS).

The D17 VHF-FM initiative will use funds to procure standards based, commercial off-the-shelf VHF-FM radio communications equipment (hardware). Procurement will be in compliance with FAR regulations.. Landline connections from these sites to Coast Guard units may utilize circuits leased from DITCO (a utility account included in the IT Plan).

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world’s premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Survey and design, environmental & lease agreements. FY96 - completed.
- Construction, environmental & lease agreements, & procurements. FY97 - in progress.
- Construction, environmental & lease agreements, & procurements. FY98 - in progress.
- Site clean ups. FY99 - in planning.

**PROJECT STATUS:** The D17 VHF-FM project is on schedule and budget. The initial site upgrades have been completed, and no major problems have been encountered. Construction is planned to be completed in FY98, with site clean ups and environmental remediation work scheduled for 1999. The project is delivering anticipated performance benefits required to support the unique needs of the Alaska area of operations. Projections submitted in a FY98 budget request remain current. Significant changes in program planned spending occurred in 1996/1997 to meet the unique needs of the Alaska area of operations. The project funding was accelerated by one year, although total life cycle costs remain the same.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 6.400 | $ 7.400 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 13.800

**PERFORMANCE AND SAVINGS:** This initiative improves vital communications infrastructure and systems to maintain or improve services mandated by law and treaty. Using COTS hardware and providing standardized infrastructure will minimize costs now and in the future. Under the Government Performance and Results Act, D17 VHF-FM relates primarily to "outcome performance." The D17 VHF-FM project ensures the Coast Guard makes maximum use of the lowest cost telecommunications available and standardizes infrastructure to meet the demands of the Alaska environment. The project provides for continuous 24/7 radio communications for Coast Guard short range Command and Control including voice and data channels to boats, cutters and aircraft.

The D17 VHF-FM project also provides communications needed to meet international treaty obligations under the Safety Of Life At Sea (SOLAS) Global Maritime Distress And Safety System. Public information services include Broadcast Notice To Mariners (BNTM) provided by this VHF-FM system. This information is vital to the safe operation of the various public, mercantile and Coast Guard vessels and operational platforms in the D17 area of responsibility. These Coast Guard operational platforms also directly perform the functions associated with the Strategic Goals of the draft FY99 Coast Guard Performance Plan. These goals include Safety, Protection of Natural Resources, Mobility, Maritime Security and National Defense.

**Cost Benefits**

Tangible:

The Coast Guard achieves significant cost avoidance and reliability improvements by upgrading these sites to modern technology. Transportation to and maintenance support of the remote mountaintops on which many of these sites are located is always extremely costly, and often impossible due to weather.

Intangible:

Increase reliability, performance, and multi-mission capability by:

- modern, standards based electronics.
- consistent infrastructure and operational control.
- reducing the amount of staff & time required to maintain.
- reduced risk by elimination of critical nodes, flexible control.
- flexible control of channels to optimize spectrum use.
- dedicated Distress Alerting Guard on channels 16 & 70 (DSC).

**INITIATIVE ID:** USCGO027

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Steve Wolf, (202) 267-1160

**TITLE OF PROGRAM/PROJECT:** Defense Message System (DMS)

**TYPE:** PII

**DESCRIPTION:** DMS is a DOD mandated program that will replace the existing world-wide AUTODIN record message system with a global, international X.400/X.500 standard electronic mail system at less cost by using commercial-off -the-shelf products. DMS will combine "organizational" and "individual" messaging into a single, multi-level secure system. DMS will bring users throughout DOD and Coast Guard, multi-level secure, desktop-to-desktop communication with the added capability of multimedia message attachments. When fully implemented, DMS will support all administrative, command and control, and intelligence missions, sustaining both shore and mobile assets. Close monitoring and coordination with the Navy on this project are vital to ensure continued interoperability with the Navy, DOD and Allied Forces.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.
- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Coast Guard DMS Transition Plan submitted for inclusion as Appendix F of the Department of the Navy DMS Transition Plan. Completed 12/96.

- Milestone 2: Initial evaluation, planning, programming, and budgeting for required Coast Guard staff and funding to implement project. Completed 4/97.

- Milestone 3: DMS supplants existing Tactical Messaging Facilities and is fully integrated as the Coast Guard message system. Projected 12/99.

- Milestone 4: Fully Functional System. Projected 12/08.

**PROJECT STATUS:** Prototyping/Limited Production including initial systems integration. Costs are projected Coast Guard costs only, and do not include the funding or support projected to be provided by the Navy.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .250 | $ 1.400 | $ .950 | $ .300 | $ .400 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 3.300

**PERFORMANCE AND SAVINGS:** DOD intends to terminate the AUTODIN system in December 1999. The Coast Guard, as an armed force of the U.S., must maintain interoperability with DOD at all times. DMS will replace the current Coast Guard messaging system, allowing continued messaging interoperability with DOD. DMS will provide global connectivity, interoperability, multi-media message attachments, and writer-to-reader security. As an essential component of the Coast Guard's telecommunications infrastructure, DMS will support all Coast Guard business processes.

In addition to ensuring mandatory interoperability with our DOD counterparts in the areas of organizational and individual messaging, DMS will provide greater communication capability through multi-media message attachments, including digitized graphics, images, audio and video clips. Furthermore, DMS will support improved business practices through transmission of Electronic Commerce and Electronic Data Interchange (EC/EDI) information.

With the addition of PCMCIA card readers, Fortezza card technology and an enhanced DMS version of Microsoft Exchange, the SWIII promises to be fully compatible with DMS. The Defense Information Systems Agency (DISA) and the Department of the Navy (DON) intend to bear much of the DMS infrastructure cost. Coast Guard funds will be used to procure additional components and training to extend the benefits of DMS messaging to the user's desktop. Procurement of DMS components will be through the existing DOD DMS contract. DMS will directly support critical Coast Guard operations in all mission areas, on both shore-based and mobile platforms. As an essential component of the Coast Guard's telecommunications infrastructure, DMS is linked with other infrastructure IT initiatives such as the CG Recabling Project, Standard Workstation III migration, CG Intranet (CGDN+) Project, Switched Voice Replacement Project (SVRP), COMMSYS 2000, FTS2000 and DITCO.

DMS offers a less expensive, commercially available, government-wide standard, interoperable messaging environment. Numerous benefits will be derived from DMS implementation, including: (1) Increased interoperability with DOD and other government agencies through use of standardized, COTS products. (2) Increased efficiency through improved connectivity and automation. (3) Better security through use of leading edge security products with encryption performed at the users workstation. (4) Use of unclassified networks for all classifications of message traffic will eliminate the need for duplicate, specialized use, "stovepipe" systems.

If not funded, Coast Guard will lose it's capability to communicate with the Navy, DOD counterparts and our allies. The many benefits provided through DMS will not be realized. Significant funding, network and infrastructure support offered by the DON and Defense Information Systems Agency (DISA) will fail to be realized or effectively utilized by the Coast Guard.

DMS will be used to manage and distribute the formal message traffic and other information necessary to operate and maintain the various Coast Guard operational platforms that perform the functions associated with the Strategic Goals of the draft FY99 Coast Guard Performance Plan. These goals include Safety, Protection of Natural Resources, Mobility, Maritime Security and National Defense.

**Cost Benefits**

Tangible:

The Coast Guard projects obtaining millions of dollars worth of support from DON, and potentially millions more in network infrastructure support from DISA to support the transition from AUTODIN. These Coast Guard resources are committed to ensure an orderly transition, and to optimize the support provided by other agencies, while integrating DMS into the Coast Guard communications systems and infrastructure.

Intangible:

Increase management efficiencies by:

- Full interoperability with the emerging federal standards.
- Standardized with other agencies.
- Consistent infrastructure with other agencies.
- Leverage investment by DON/DOD/DISA
- Reducing the staff & time required to manage message traffic.

**INITIATIVE ID:** USCGO028

**ORGANIZATION/ENTITY:** USCG/G-OCC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Edison Lewark, (202) 267-6997

**TITLE OF PROGRAM/PROJECT:** Electronic Charting System (ECS)

**TYPE:** PIM

**DESCRIPTION:** This system is needed to improve safety of cutters navigating in piloting waters or at sea. Efficiencies may be realized in the future based on a fully employed Electronic Charting Display Information System (ECDIS) and ECS where crew manning may be reduced due to the automation of manual plotting procedures. Additionally, this effort will be migrated into the Command and Control PC, the 98 Geographic Display Operations Computer (GDOC) replacement.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Sep 97: Completion of GDOC 97 (version) distribution
- Fall 97: Completion of 110 fleet installs
- Fall 98: Migration of GDOC

**PROJECT STATUS:** Prototyping/Limited Production.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .265 | $ .265 | $ .265 | $ .265 | $ .265 | $ .265 | $ .265 | $ .265 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.120

**PERFORMANCE AND SAVINGS:** This system provides a safer and more efficient means for ships to navigate. Savings will be realized in fewer accidents and less people/equipment necessary to navigate vessels.

**INITIATIVE ID:** USCGO029

**ORGANIZATION/ENTITY:** USCG/G-MSC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Mike Fays, (202) 366-6487

**TITLE OF PROGRAM/PROJECT:** Engineering Information Technology System (EITS)

**TYPE:** PII

**DESCRIPTION:** EITS replaces the Marine Safety Center's (MSC's) current proprietary Micro VAX II and CGSW II (CTOS) network. The Micro VAX II system and CGSW II network are both obsolete and proprietary systems that do not provide adequate support for MSC to meet mission goals. In addition, Digital Equipment Inc. (DEC) no longer provides maintenance support or parts for the Micro VAX II system. The new EITS network is an open systems platform utilizing a structured wiring topology, Windows NT technology and SWIII's. The EITS system provides better automated engineering support and data/information compatibility between MSC and its customers in the future.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** Full Scale Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .330 | $ .600 | $ .305 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**Note: Maintenance Cost are covered under SWIII contract.**

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.235

**PERFORMANCE AND SAVINGS:** The maritime industry currently develops vessel plans using computer aided design tools. The upgrades associated with EITS allow for processing, storage, and retrieval of vessel plans in digital format. The MSC has actively formed a partnership with the American Bureau of Shipping (ABS) and the maritime industry to enable Electronic Data Interchange (EDI), which CGSWII cannot support. Without these upgrades the MSC will fall further behind the maritime industry and will not be able to effectively complete its mission. EITS will promote greater productivity at all levels by significantly reducing time in searching, retrieving, and inputting data to perform plan review. Significant benefits will be realized from the enhanced support provided by the MSC to other Coast Guard units and higher quality service to the maritime industry, through a more functional and efficient computer platform. Additionally, the command will have a better process of forecasting and redirecting resources to accomplish its tasks. A recent case in point relates to hundreds of man-hours expended in the gathering of information for mandatory user fees, most of which was accomplished by hand.

MSC anticipates receiving additional requests for information of such magnitude in the future. Also, the centralization and standardization of all engineering program data files will allow the different engineering programs to share vessel configuration data instead of having a separate file for each program. This will substantially reduce hundreds of man-hours each year for this function alone.

**INITIATIVE ID:** USCGO030

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
LCDR Mark Rose, (202) 267-1257

**TITLE OF PROGRAM/PROJECT:** EXECUTIVE INFORMATION - Corporate Database$^3$/PGB

**TYPE:** AIM

**DESCRIPTION:** The Executive Information System interacts with the Financial Desktop and the FINCEN Total System to allow queries and produce reports for analysis by the Coast Guard senior decision makers.

Corporate Database$^3$/PGB
The Corporate Database$^3$ (CDB$^3$)/PGB System contains summary-level, corporate financial data required for development of the Coast Guard's Program Budget. It also provides a source for query of corporate financial, operational and personnel assets data. The Coast Guard will realize cost avoidance and effectiveness improvements through expanded CDB$^3$/PGB system utilization. Through CDB$^3$/PGB system capabilities for query of corporate data, the Coast Guard analyst is able to respond to ad hoc information request more quickly and effectively. Since the system integrates information from several sources, the manager is able to correlate information and analyze spending or activity trends in Coast Guard mission areas.

CDB$^3$/PGBdatabase will reside in ORACLE on an CPMPAQ server. The graphical user interface (GUI) runs on the Coast Guard Standard Workstation III.

Funds will be used to maintain and operate the CDB$^3$/PGB system, to make further enhancements to the GUI as needed to refine the presentation of the data contained in the system. As well as to fully develop drill down and "what if" capabilities. Funds will also be used to look at the feasibility of using the DAFIS Management Information Reporting System (MIR) as a possible source of financial data for replacing the current monthly updates via tape. Additional funding will be used to automate and update entry of source data such as Abstract of Operations and Personnel Allowance Lists.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential

- GOAL 2: Place diversity in the Coast Guard at center stage

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 12/98 Conduct Business Analysis for the inclusion of the Standard rates and the Personnel Allowance List. Integrate Source Data Automation/Enhanced drill down capabilities.
- 9/99 O&M funding to develop FINCEN Total System and Financial Desktop.

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .428 | $ .428 | $ .428 | $ .428 | $ .428 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.568

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO031

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
LCDR Mark Rose, (202) 267-1257

**TITLE OF PROGRAM/PROJECT:** EXECUTIVE INFORMATION - GPRA

**TYPE:** AIM

**DESCRIPTION:** The Executive Information System interacts with the Financial Desktop and the FINCEN Total System to allow queries and produce reports for analysis by the Coast Guard senior decision makers.

GPRA
This system will build upon CDB$^3$/PGB and the FINCEN Total System program to tie the traditional program budget structure with GPRA outcomes. The program connections are not discrete because Coast Guard is a multimission organization, a mix of program activities contributes to each of the Strategic Goals. This system will relate expenditures to GRPA outcomes.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 12/98 Develop Business Analysis
- 6/99 Develop Software Requirements Document
- 9/99 Software Development/Documentation/Initial Functional Qualification Testing
- FY01-03 System O&M funding to develop Imaging/FINCEN Total System/Financial Desktop.

**PROJECT STATUS:** Research and/or Development.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 6.000

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce

the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO032

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
LCDR Mark Rose, (202) 267-1257

**TITLE OF PROGRAM/PROJECT:** EXECUTIVE INFORMATION - Performance and Results Executive Information System (PREIS)

**TYPE:** AIM

**DESCRIPTION:** The Executive Information System interacts with the Financial Desktop and the FINCEN Total System to allow queries and produce reports for analysis by the Coast Guard senior decision makers.

Performance and Results Executive Information System (PREIS)
PRIES is the end state Executive Information System integrating GPRA and CDB$^3$/PGB allowing a central decision support system for senior CG management. This system would allow complete project management and cost tracking. PREIS will enable senior managers to view the entire "4D" Budget Model including PPA (Program, Projects, and Activities), AFCs (Allotment Fund Codes), Object Classifications, and Program Budget/GPRA goals.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 9/99 Conduct the Business Analysis and Software Requirements Document
- 9/00 Systems Development
- 9/01 System Deployment
- FY02 and beyond O&M

**PROJECT STATUS:** Research and/or Development

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 0 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 6.000

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions.

Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO033

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINANCIAL DESKTOP - Budget Execution to Expenditure (MBE)

**TYPE:** AIM

**DESCRIPTION:** The Financial Desktop umbrella is primarily a field system which supports budget distribution, procurement and funds management. A number of "applets" reside in the financial desktop. The goal is to provide field users with an appropriate suite of integrated tools which minimize data entry and permit efficient stewardship of Coast Guard resources. This field system generates the source information that feeds the Coast Guard financial management program.

Budget Execution to Expenditure
The enhanced capability to link the budget to actual expenditures is currently scheduled for addition to IBUDS/AFTS in FY99. The effort is expected to cost $1M. This project will link IBUDS/AFTS and DAFIS.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 9/99 Integration completed.

**PROJECT STATUS:** Mission Need

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 0 | $ 1.000 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.000

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. This system permit better financial measure of performance outcomes.

**INITIATIVE ID:** USCGO034

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINANCIAL DESKTOP - DAFIS Management Information Reporting (MIR)/FAFQ

**TYPE:** AIM

**DESCRIPTION:** The Financial Desktop umbrella is primarily a field system which supports budget distribution, procurement and funds management. A number of "applets" reside in the financial desktop. The goal is to provide field users with an appropriate suite of integrated tools which minimize data entry and permit efficient stewardship of Coast Guard resources. This field system generates the source information that feeds the Coast Guard financial management program, MIR/FAFQ

Management Information Reporting (MIR) is a modern ORACLE financial data warehouse and management information reporting system developed initially by DOT, providing remote users real time access to DAFIS financial data via an easy to use graphical interface. Planned extensions include improving reporting capabilities by adding Coast Guard unique details and summaries, adding canned reports, and customizing the graphic interface for Coast Guard use. MIR as well as Corporate Data Base (CDB) support the data warehouse project as crucial sources of financial source and meta-data. MIR may also be capable of automatically refreshing CDB on a nightly basis, replacing tape updates which are performed monthly, resulting in more timely and cost effective data. MIR implementation will provide financial managers with real-time access to financial. not currently available.

In FY96, a contracted was placed to study Coast Guard data warehousing design and implementation issues culminating in an executive plan. Based on this plan, Coast Guard will develop and implement a Coast Guard-wide financial data warehouse which incorporates MIR and CDB data.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential

- GOAL 2: Place diversity in the Coast Guard at center stage

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 9/98 Deploy extensively

**PROJECT STATUS:** System Maintenance and System Deployment.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| $ .300 | $ .300 | $ .300 | $ .300 | $ .300 | $ .300 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.800

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

The Coast Guard will realize cost avoidance and effectiveness improvements through utilization of MIR/data warehousing. CDB's ability to integrate information from several sources along with MIR's ability to provide real-time access to financial data. Coast Guard will be able to provide manager the ability to correlate information and analyze spending or activity trends in Coast Guard mission areas.

**INITIATIVE ID:** USCGO035

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINANCIAL DESKTOP - EC/EDI

**TYPE:** AEC

**DESCRIPTION:** The Financial Desktop umbrella is primarily a field system which supports budget distribution, procurement and funds management. A number of "applets" reside in the financial desktop. The goal is to provide field users with an appropriate suite of integrated tools which minimize data entry and permit efficient stewardship of Coast Guard resources. This field system generates the source information that feeds the Coast Guard financial management program.

EC/EDI
FINCEN has established a successful and growing electronic commence program for electronic invoice billing at the Coast Guard Finance Center. This initiative is to extend EC/EDI to the procurement community. A study is underway to plan integration with other Coast Guard financial/procurement applications and implementation of digital signature standards in LUFS-NT, AFTS-NT, IBUDS-NT and FLS.

This initiative is required under the Presidential Memorandum of October 1993 and the Federal Acquisition Streamlining Act of 1994.

EC/EDI improves business practices through improved efficiency of operations, improved information management, better customer service, better dissemination of solicitation information, increased contracting opportunities, improved competition and reduction in administrative lead times.

For the most part, EDI implementation plan will overlay the Standard Workstation III migration plan to satisfy hardware requirements. Software will be obtained through the GSA FAST Program. Funds will be used for the study of integration with other Coast Guard applications and digital signature methodologies. The FY98 AC&I budget request is to develop and build this functionality.

To effectively use Coast Guard resources, EC/EDI will link with LUFS-NT and the Fleet Logistics System (FLS).

The September1993 Report of the National Performance Review (NPR) recognized the significant resource savings that can accrue from an aggressive federal government-wide program of EC and recommended that such a program be established. In an October1993

memorandum implementing the NPR recommendation, the President emphasized his commitment to "fundamentally altering and improving the way the Federal Government buys goods and services" by ensuring that electronic commerce is instituted as quickly as possible. The memorandum outlined an aggressive schedule for EC implementation. The Federal Acquisition Streamlining Act of 1994 further solidifies the commitment to EC by requiring development of a Federal Acquisition Computer Network (FACNET) to evolve the Government acquisition process from a paper-based process to an electronic process.

Full FACNET is required by December 31,1999. Seventy-five percent of all DOT simplified acquisition transactions must be done via electronic means by this date or the simplified acquisition threshold for the Department, including all operating administrations, will automatically revert back to $50,000 from $100,000.

A rigorous certification of the EC/EDI gateway has been completed This is a very significant accomplishment as this certification extends to all Coast Guard activities. The Coast Guard is now connected to the Federal Acquisition Network (FACNET) community and posed to meet NPR, FASA and OST electronic commerce goals. an EC/EDI pilot test has been implemented at test locations at FD&CC LANT. MLCPAC FINCEN and Headquarters.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant’s strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 9/97 Procure Software license
- 3/98 Implement functionality

**PROJECT STATUS:** Prototyping/Limited Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .450 | $ 1.175 | $ .105 | $ .196 | $ .075 | $ .075 | $ .075 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.151

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO036

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINANCIAL DESKTOP - IBUDS/AFTS

**TYPE:** AIM

**DESCRIPTION:** The Financial Desktop umbrella is primarily a field system which supports budget distribution, procurement and funds/asset management. A number of "applets" reside in the financial desktop. The goal is to provide field users with an appropriate suite of integrated tools which minimize data entry and permit efficient stewardship of Coast Guard resources. This field system generates the source information that feeds the Coast Guard financial management program.

IBUDS/AFTS
The Integrated Budget Development System (IBUDS) is a software program that supports the Coast Guard budget process for the Operating Expense appropriation by providing automated support for receiving and processing Resource Change Proposals (RCPs), generating and submitting Coast Guard budget from development of the Congressional Stage budget through the Operational Stage budget, distributes the Congressionally approved budget to the Administrative Target Units(ATUs) and generates spend plans. The Automated Funds Transfer System (AFTS) is an automated tool used to process funds transfers within the Coast Guard, distributing initial Operating Expense funding to Coast Guard operating elements after the funding process is completed and managing funding transfers that occur during budget execution.

IBUDS was created to combine planning, programming, and budgeting functions into a single automated, streamlined system for managing Coast Guard OE Appropriated Funds of $2.7 billion annually. IBUDS has automated, simplified, and standardized the entry of ATU budget line item requests and decreases the time required for the funds transfer process. The system eliminates the need for re-keying and reconciliation of funding documents between offices. It also reduces the need for telecommunications by providing a capability for batch processing of updates to DAFIS. AFTS was developed to replace the manual preparation and tracking of Financial Transfer Authorizations (FTAs) and Change in Financial Plans (CIFPs). Additionally, AFTS is used to distribute funding information generated through IBUDS to Coast Guard field units.

IBUDS provides ATU and Headquarters financial managers with a system for administering their funds more effectively and efficiently. It also provides a historical database for tracking budget information over several years. IBUDS provides a means to track budget requests for the OE Appropriation within a central database and is accessible

through the Coast Guard local area network. The system will increase the efficiency and accuracy of the process further through improved source data entry (one-time entry which reduces errors), use of one standard form for all funds transfer types, automated distribution of funding documents, use of a standardized numbering system for all funding documents, and through a further enhanced capability for automated research and reconciliation of documents. AFTS will be enhanced to include the capability to manage other appropriations and will be integrated with the Large Unit Financial System (LUFS) and IBUDS.

IBUDS VER 2.0 presently runs on CGSWII. When the Coast Guard switches to SWIII. IBUDS is planned to be converted to VER 3.0. Funds will be utilized for the conversion which is scheduled for delivery by August 1997. The additional recurring funding indicated above is to be used for a system maintenance contract and minor software upgrades. AFTS utilizes a central Progress database developed by the Coast Guard. The database is accessible to authorized users across the Coast Guard Headquarters local area network via the Coast Guard Standard Workstation. AFTS has been converted to SWIII. IBUDS and AFTS are strategically planned to link both with each other and with LUFS and DAFIS to support the entire Coast Guard financial management system. In concert, these systems provide a more efficient and accurate means to strategically plan and program Coast Guard resources to meet mission requirements.

In FY98 the IBUDS/AFTS “applet” will be enhanced to include the other appropriations. Of the $700K in services scheduled for FY98 $200K is to add the Reserve and Training (R/T) appropriation, $400K is for the AC&I appropriation and $100K is to add the remaining appropriations.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant’s strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES**

- 12/97 Add additional appropriations (R/T, AC&I, etc.)

**PROJECT STATUS:** System Deployment and System Maintenance.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .070 | $ .770 | $ 1.070 | $ .070 | $ .070 | $ .070 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.120

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce

the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

IBUDS provides a timely and accurate planning, programming, budgeting, and reporting tool that allows Headquarters, programs and ATUs to manage their resources. Reduced man hours in accounting, reporting, and collecting data provide significant savings in personnel costs. Greater accuracy is also achieved with the automated system. As IBUDS and AFTS are upgraded, more man hours will be saved with less man hours needed to do the same amount of work.

A lack of funding for IBUDS/AFTS would require much of the Coast Guard's budgeting and funds distribution to be performed manually, thereby increasing the time necessary to perform the tasks. Less accuracy may also result due to human error. Strategic planning may suffer due to less data that would be readily available. Continuing funding of AFTS is critical to the funds transfer process.

**INITIATIVE ID:** USCGO037

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINANCIAL DESKTOP - LUFS NT

**TYPE:** AIM

**DESCRIPTION:** The Financial Desktop umbrella is primarily a field system which supports budget distribution, procurement and funds management. A number of "applets" reside in the financial desktop. The goal is to provide field users with an appropriate suite of integrated tools which minimize data entry and permit efficient stewardship of Coast Guard resources. This field system generates the source information that feeds the Coast Guard financial management program.

LUFS
LUFS is the Coast Guard's procurement and funds management software. LUFS is used throughout the Coast Guard at Unit, Group, District, and Headquarters offices as a tool to develop procurement actions and to report, commit, and obligate funds. LUFS is used for the transmission of financial and procurement data to the Coast Guard Finance Center (FINCEN) for update to Departmental Accounting and Financial Information Systems (DAFIS) and automates the reconciliation of DAFIS balances with local ledger accounts maintained in LUFS. LUFS also interfaces with Coast Guard systems such TMS, DRMIS, IMIS, SCAMP, and STAR which use LUFS as their financial management and transmission vehicle.

LUFS NT will be the Coast Guard's SWIII compatible version and will include enhanced simplified acquisition and funds management capabilities.

LUFS is the Coast Guard's mandated procurement and funds management tool. LUFS is instrumental in automating the Coast Guard's procurement, accounting, and funds management process. Without LUFS or similar tools, Coast Guard financial management would rely on manual or semi-automated processes of variable integrity.
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LUFS supports improved business process by providing a stable, consistent and proven Coast Guard-wide procurement and funds management tool with a host of sophisticated features. LUFS automates the small purchase function and LUFS ensures the timely commitment, obligation. and reconciliation of accounting data to and from DAFIS. In addition, LUFS promotes fiscal responsibility by providing funds status and funds management capabilities.

The LUFS 7.2 software currently operates on the proprietary Coast Guard Standard

Workstation II. The software is written in the ADS database language and was developed by the Coast Guard Electronics Engineering Center. All other software required to operate LUFS is part of the standard workstation bundle. Additionally, for transmission purposes, LUFS requires access to the Coast Guard Data Network (CGDN) via either a X.25 link or dial-up modem.

LUFS NT operates in the Coast Guard Standard Workstation III (SWIII) environment consisting entirely of open system hardware and software. It is currently on target for a January 1998 deployment. Deployment of the new software to field activities will parallel deployment of SWIII hardware and software to field activities As LUFS NT matures, LUFS 7.2 will be gradually phased out until the year 200*X* when all SWIII migration is scheduled for completion. In FY97, only Headquarters will have migrated to LUFS NT. In addition, funds will be used to provide support resources (troubleshooting. code maintenance, etc.) during the phaseout the current version and implementation of the new version of LUFS.

The LUFS initiative is strategically planned to link with the following IT initiatives to result in effective use of resources.

- Electronic Commerce/Electronic Data Interchange (EC/EDI) Initiative. Integration of LUFS small purchase transactions with procurement EC/EDI initiative underway.

- Property and Asset Management Improvement Initiative. Link LUFS with Coast Guard property and asset management systems to capture accountable and capitalized property at point of procurement.

- Integrated Budget Development System/Automated Funds Transfer System (IBUDS/AFTS). Link LUFS with these systems in order to capture spend plan and funding and send internal transfer and execution data.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant’s strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential

- GOAL 2: Place diversity in the Coast Guard at center stage

- GOAL 3: Meet the mandate to streamline with no reduction in essential services

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements

- GOAL 5: Enhance and extend our reputation as the world's premier maritime service

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 12/97 - Beta test LUFS-NT

- 3/98 - Deploy LUFS-NT

**PROJECT STATUS:** System Deployment and System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .630 | $ .500 | $ .500 | $ .500 | $ .450 | $ .450 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 3.030

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

Benefits to be realized through implementation of LUFS and related initiatives including reducing the time and effort necessary, through automation, to place procurement actions while increasing, through linkage to EC/EDI, the small purchase threshold. This action will subject fewer actions to the added cost and delay of large contracting authority. In addition, capturing accountable and capitalized property at the point of procurement will improve Coast Guard asset management resulting in better resource management through better inventory management and fewer duplicative procurements. Additional savings can be achieved by improving the credit card module in LUFS, further promoting this efficient procurement tool. Linkage to IBUDS and AFTS will fully integrate funding and budget execution and eliminate the unnecessary duplicate data entry. Failure to fund this project will increase the time and effort necessary to place small purchase procurement actions and degrade the timeliness and accuracy of financial information reported at the Coast Guard and Departmental levels.

**INITIATIVE ID:** USCGO038

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINANCIAL DESKTOP - Source Automation (end user) Systems

**TYPE:** AIM

**DESCRIPTION:** The Financial Desktop umbrella is primarily a field system which supports budget distribution, procurement and funds management. A number of "applets" reside in the financial desktop. The goal is to provide field users with an appropriate suite of integrated tools which minimize data entry and permit efficient stewardship of Coast Guard resources. This field system generates the source information that feeds the Coast Guard financial management program.

Source Automation (end user) Systems
This initiative will integrate all of the "applets" on the financial desktop ensuring and efficient flow of information through the desktop. This automation will improve the integrity of data but eliminating redundant entries. This integration will tie in existing systems such as FARA/CGAMS (PROCUREMENT FUNCTIONALITY), CMplus, CEDS, SCAMPS, AIM.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
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- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

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**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 9/98 Conduct Business Analysis

- 9/99 Commence integration

- 9/00 Complete integration, deploy functionality

**PROJECT STATUS:** Mission Need

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ .450 | $ 1.365 | $ .765 | $ .100 | $ .100 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.780

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of

limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO039

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Jim Kearney, (202) 267-0961

**TITLE OF PROGRAM/PROJECT:** FINCEN TOTAL SYSTEM - CFO Audit Discrepancy Abatement

**TYPE:** AIM

**DESCRIPTION:** The Total System provides the centralized consolidation of the source data collected through the financial desktop. The Total System is built on ORACLE products. The goal of the total system is to provide centralized and integrated data warehouse which support all of the needs of the Coast Guard financial managers.

CFO Audit Discrepancy Abatement
This projects primary goal is to build a database of imaged documents which support the ownership and valuation of Coast Guard fixed assets. The database will be compatible with the imaging system employed at FINCEN (170 Systems - Markview) and be indexed so that the data can be retrieved. This is the leading effort in establishing FINCEN as the financial repository for the Coast Guard.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 8/97 - Delivery Order issued to Systems Integration Group for data collection and database development.
- 9/98 - Information collected and database constructed at FINCEN.

**PROJECT STATUS:** Prototyping/Limited Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .800 | $ .800 | $ .400 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.000

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO040

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINCEN TOTAL SYSTEM - Integration of the Consolidating Systems

**TYPE:** AIM

**DESCRIPTION:** The Total System provides the centralized consolidation of the source data collected through the financial desktop. The Total System is built on ORACLE products. The goal of the total system is to provide centralized and integrated data warehouse which support all of the needs of the Coast Guard senior financial managers.

Integration of the Consolidating Systems
This effort is the final step in creating the Total System at FINCEN. This involves the integration of all the financial systems at FINCEN. All accounting, bill paying and asset management systems will be integrated. As well as source information for CFO/DOT audit purposes.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 12/99 Conduct Business Analysis
- 12/00 Complete requirements document
- 6/01 Complete design specification
- 12/01 Stand System up

**PROJECT STATUS:** Research and/or Development.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 0 | $ 0 | $ .450 | $ 1.365 | $ .765 | $ .350 | $ .350 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 3.280

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions.

Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO041

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Ed Murray, (202) 267-0676

**TITLE OF PROGRAM/PROJECT:** FINCEN TOTAL SYSTEM - Project Management System

**TYPE:** AIM

**DESCRIPTION:** The Total System provides the centralized consolidation of the source data collected through the financial desktop. The Total System is built on ORACLE products. The goal of the total system is to provide centralized and integrated data warehouse which support all of the needs of the Coast Guard financial managers

Project Management System
The goal of this system is to provide the bridge between project management and financial accounting. This system will collect all cost associated with a specific project. This system will also add project related construction-in-process costs. Upon completion of the work the asset will be capitalized and the asset data will flow directly into the asset management database. All of the information necessary to support ownership and valuation will be captured at the source. This system will serve as the database of all electronic source/data entry points to track projects utilizing a more robust accounting string.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 12/98 Conduct Business Analysis

- 12/99 Complete requirements document

- 6/00 Complete design specification

- 6/01 Stand System up

**PROJECT STATUS:** Prototyping/Limited Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 0 | $ .500 | $ 3.130 | $ 2.530 | $ .830 | $ .830 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 7.820

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**INITIATIVE ID:** USCGO042

**ORGANIZATION/ENTITY:** USCG/G-CFS

**ORGANIZATIONAL POINT OF CONTACT:**
Jim Kearney, (202) 267-0961

**TITLE OF PROGRAM/PROJECT:** FINCEN TOTAL SYSTEM - Remote Imaging System-Data Warehouse

**TYPE:** AIM

**DESCRIPTION:** The Total System provides the centralized consolidation of the source data collected through the financial desktop. The Total System is built on ORACLE products. The goal of the total system is to provide centralized and integrated data warehouse which support all of the needs of the Coast Guard financial managers.

Remote Imaging System-Data Warehouse
This effort complements the previous project to rectify CFO discrepancies. This initiative will provide the software and hardware for the field to process the information directly to the FINCEN. It will also provide the means for the field to have remote access into the FINCEN. This project will provide the system by which the data warehouse is populated and accessed.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- 12/97 Procure scanners and software
- 6/98 Provide Equipment to the field

**PROJECT STATUS:** Prototyping/Limited Production.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 3.100 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 | $ 1.000 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 8.100

**PERFORMANCE AND SAVINGS:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. Theses systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

**Initiative ID:** USCGO043

**Organization/Entity:** USCG/G-CFS, Finance Center

**Organizational Point of Contact (Name & Phone #):**
Mike Butler, (757) 523-6825

**Title of Program/Project:** FINCEN Total System (FIRM)

**Type:** AIM

**Description:** The Total System provides the centralized consolidation of the source data collected through the financial desktop. The Total System is built on ORACLE products. The goal of the total system is to provide centralized and integrated data warehouse to include Accounts Receivable, Assets, Accounts Payable, Purchasing, General Ledger and ORACLE Financials which support all of the needs of the Coast Guard financial managers.

FIRM
The Finance Center IRM System (FIRM) provides the Coast Guard with a consolidated accounting and paying office. Savings accrue through the consolidation of one central billing office to accomplish accounting and payment transactions for the Coast Guard. FINCEN systems such as the Payment History System (PHS), Production Control System (PCS), Change Image Processing System (CHIPS), Workflow Imaging Network System(WINS) and Consolidated Billing System (CBS) enable the Coast Guard to electronically process and track field financial transactions and vendor invoices. CHIPS is a paperless process that electronically receives and processes incoming LUFS batches from the field for input into DAFIS and routing into the Voucher Examination Module for matching with vendor invoices prior to payment. The Imaging System will allow multiple users to interactively retrieve, control, and process financial and correlating source data and nearly eliminate the need to manually manipulate paper source documentation. The Debt Management and Collection System (DMACS) is a commercial off the shelf system that will enable the Finance Center to better manage the Coast Guard's accounts receivable.

The Coast Guard's business processes have been improved through the development of a successful and growing electronic commerce program for electronic invoice billing. The electronic credit card payment program has been successfully expanded to Federal Highways Administration, Federal Transit Authority and Defense Commissary Agency. The FINCEN's Rapid Electronic Data Interchange Method System (FREDIM) is capable of handling Electronic Data Interchange (EDI) data and is being upgraded to handle additional vendor invoices. By streamlining the payment process and eliminating manual intervention through implementation of the Imaging System, the Coast Guard will benefit by resource savings and lower interest penalties. The system will improve interagency billings, EDI network connectivity and data storage/retrieval. This will increase internal

and external user efficiency while allowing the FINCEN to better serve its customers, achieve efficiencies and reduce overhead. Coast Guard will realize a minimum annual reduction of $75K in small purchase interest penalties and a minimum of $50K increase annually in discounts and expected to realize a minimum FTE reduction of ten. The Debt Management and Collection System (DMACS) Project will reengineer the Coast Guard debt management and collection business processes, including the correction of over 30 major accounts receivable deficiencies that currently exist in DAFIS. It is expected to result in an estimated $1.2M in tangible savings. Intangible savings to the Coast Guard will be more accurate records, faster and more frequent billing, more timely and accurate data, and numerous customer improvements such as customizable dunning and billing letters.

The primary place of operations is FINCEN. Coast Guard managers at the Areas, Maintenance and Logistics Commands, Districts, and Headquarters have, or will have, access to the FINCEN's transactional data. Coast Guard field units provide data to the FINCEN via the Large Unit Financial System (LUFS). The FINCEN computer systems communicate within the FINCEN over a local area network. External communications are via the ADTN2000, FAA managed network, X.25 link to the Department of Transportation mainframe in Plano, Texas. Additionally, the FINCEN operates several local systems on the Unisys , HP and VAX suites of hardware. FY98 will be the fourth year of the four-year IT project to replace its outdated proprietary systems with powerful, scaleable open system hardware and software. Currently, the bulk of the hardware and software purchases are completed or are on order. Migration is expected to be completed during FY98.

FIRM is strategically planned to link with the following IT initiatives:

- EC/EDI - a pilot test has been implemented at the FINCEN
- LUFS/LUFS NT - LUFS data is transmitted to the FINCEN and processed through the CHIPS system
- Full implementation of the FINCEN Imaging System is scheduled for completion during the first quarter of FY98. The imaging prototype was successfully completed and demonstrated in July of 1996.
- FY97 and FY98 funds will be utilized for capital investments, operations and maintenance, personnel, commercial services, inter/intra-agency support, and other services as required.

**OA/OST GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the Commandant's strategic goals.

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential

- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:** Financial management systems fill a support role and as such contribute to all of the DOT strategic goals.

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**Milestones 1, 2, 3 & 4 and Dates:**

| | |
|---|---|
| (1) Implement Phase one of the new Imaging System | 10/96 |
| (2) Implement Final phase of Imaging System | 12/97 |

(3) VAX replacement 01/99

(4) Complete migration 12/99

**Project Status:** Full Scale Production and System Deployment.

**Project Cost Per Year (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 6.291 | $ 6.631 | $ 5.874 | $ 5.991 | $ 6.110 | $ 6.232 | $ 6.356 | $ 6.482 |

**Initiative Total Life Cycle Cost (in millions):** $ 49.967

**Performance and Savings:** This financial management system provides Coast Guard financial managers with the tools necessary to ensure effective stewardship of limited resources. These tools facilitate analysis of the effectiveness of budget decisions. These systems are support programs for the operating programs which actually produce the outcomes measured. Without strict control of financial resources it will be impossible to produce the outcomes desired.

The Coast Guard will realize a minimum annual reduction of $75,000 in small purchase interest penalties and a minimum of $50,000 increase annually in discounts and expected to realize a minimum FTE reduction of ten.

**INITIATIVE ID:** USCGO044

**ORGANIZATION/ENTITY:** USCG/G-SCT

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Joe Hersey, (202) 267-1358

**TITLE OF PROGRAM/PROJECT:** Frequency Spectrum Reallocation (FSR)

**TYPE:** PII

**DESCRIPTION:** The FSR project was initiated in response to the Title VI of the Omnibus Budget Reconciliation Act of 1993 which directed the Secretary of Commerce to transfer 200 MHz of radio spectrum, currently used by Federal agencies, to the FCC for licensing to the private sector. Coast Guard microwave communication networks, which operate in the 1710-1755 MHz segment, located in the 25 largest cities, will lose their authority to operate on February 1, 1999. These networks are used for vessel traffic control and safety operations, remote distress and safety communications, command and control of mobile platforms, and to support the VHF National Distress System. All other Coast Guard microwave communication networks that operate in this frequency segment will lose their authority to operate in 2004.

These microwave networks are an essential component of the Coast Guard's telecommunications infrastructure. The FSR initiative is required to replace Coast Guard microwave communication networks that directly support the Coast Guard's four primary missions -- maritime safety, national security, maritime law enforcement, and environmental protection.

FSR replaces essential components of the Coast Guard's telecommunications infrastructure. These networks are typically located in remote areas where commercial service is unavailable, excessively expensive, and/or cannot meet required reliability. One of the primary uses of these networks is to provide VHF National Distress System coverage to remote coastal areas. The FSR is critical to the success of G-O's improved business practice to modernize the National Distress System (NDS Modernization Project).

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world’s premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: System planning, frequency search for affected sites. Funding requests to implement migration to available frequencies. Completed FY95.

- Milestone 2: Obtain required authorization to move to new frequencies. Projected 10/97.

- Milestone 3: Identify equipment to implement the move to the new frequencies. Projected 10/98.

- Milestone 4: Acquire and install required equipment. Projected 3/00.

**PROJECT STATUS:** System Development

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .500 | $ 5.100 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 5.600

**PERFORMANCE AND SAVINGS:** FSR links with other IT initiatives to cost effectively extend the Coast Guard's telecommunications infrastructure and capabilities to remote areas where commercial service is unavailable, excessively expensive, and/or cannot meet required reliability. Strategic investments in the FSR are critical to the success of G-O's improved business practice to modernize the national distress system (NDS Modernization Project). Finally, a state-of-the-art, inter-operable, standards based telecommunications infrastructure provides the Coast Guard with an opportunity to realize future savings by providing a vehicle for quickly integrating new technologies and capabilities into the network architecture.

**INITIATIVE ID:** USCGO045

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Joe Hersey, (202) 267-1358

**TITLE OF PROGRAM/PROJECT:** Global Maritime Distress and Safety System (GMDSS) Phase V

**TYPE:** PCS

**DESCRIPTION:** GMDSS, a multi-year project, will purchase vessel and shore-based radio communications equipment to permit distress, safety, law enforcement, and navigation communications between the Coast Guard and GMDSS equipped commercial vessels. GMDSS brings the Coast Guard into compliance with the 1988 amendments to the International Safety of Life at Sea (SOLAS) convention.

GMDSS will automate the distress watch standing function at communication stations (COMMSTAs) and group offices, thus reducing manpower costs. Digital Selective Calling (DSC) equipment automatically identifies the caller and the nature of distress which will aid the Coast Guard in responding to actual cases and identifying hoaxes (false distress alerts).

GMDSS equipment will be required for the Coast Guard to communicate by radio with commercial vessels after February 1999. GMDSS is being implemented to comply with the International Safety of Life at Sea (SOLAS) convention, and is not currently linked to other IT initiatives.

GMDSS COMMSTA systems are being designed to integrate directly with the COMMSYS 2000 initiative. DSC, NAVTEX, and SITOR are all being designed for remote operation from a central operations center to the maximum extent possible.

Plans for GMDSS and VHF/FM Digital Selective Calling are being considered together. If the NDS upgrade budget request is fully funded, the VHF/FM portion of the DSC system will be implemented in concert with that program. Both this document and the GMDSS budget request note requirements/funding requests that may be superseded by the NDS upgrade program.

GMDSS requirements will be considered as the Coast Guard replaces the low-power HF and VHF radios. Radios with integrated GMDSS capabilities will be considered for these procurements if they reduce overall cost to the Coast Guard and provide the required functionality.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.
- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Complete COMMSTA MF/HF DSC system prototype installations - 8/95
- Milestone 2: Identify final system for COMMSTA MF/HF installations - 7/97
- Milestone 3: Complete installations for COMMSTA MF/HF installations - 8/98
- Milestone 4: Award contract for shipboard GMDSS equipment - 8/97
- Milestone 5: Begin DSC and SITOR installations on cutters - 6/98

- Milestone 6: Complete cutter installations - 9/99

- Milestone 7: Complete VHF DSC for group offices/NDS - 9/00

**PROJECT STATUS:** Prototyping/Limited Production. Prototype installations at all COMMSTAs have been deinstalled in preparation for the final installation of the approved configuration. Contract award for the shipboard GMDSS equipment is in the award process in Coast Guard contracting.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.725 | $ .500 | $ .700 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.925

**PERFORMANCE AND SAVINGS:** The GMDSS subsystem, Digital Selective Calling (DSC), will automatically set up radio channels and identify the station which originates the call. Hoax distress callers should be discouraged with resulting reductions in operating expenses, otherwise expended on false distress cases.

**INITIATIVE ID:** USCGO046

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Charles Pugh, (202) 267-1252

**TITLE OF PROGRAM/PROJECT:** Low Power HF Transceiver Replacement (GSB-900 Replacement)

**TYPE:** PCS

**DESCRIPTION:** This initiative will replace low power HF radio equipment throughout the Coast Guard. The Coast Guard is presently using Sunair's 900 series low power HF transceivers as a standard, short haul HF communications system. Some other non-standard ad-hoc Low Power equipment (less than 100 units) has been fielded in order to extend the life of the aging GSB-900 infrastructure. The Sunair equipment has been out of production since 1987, it is becoming expensive and difficult to maintain. This equipment allow for interoperability with other DOT agencies, DOD, and the boating public. Equipment use varies by platform but is mainly used for primary or secondary communications by mobile units.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure and safety.

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Develop functional specifications for the Low Power HF system that will replace the GSB-900. Projected 8/97.

- Milestone 2: Identify or establish a contract vehicle to procure the replacement equipment. Procure initial equipment, test, prototype installations aboard all class of cutters. Projected 12/98.

- Milestone 3: Establish follow-on support mechanisms and training programs. Projected 12/99.

- Milestone 4: Fully completed installations throughout the Coast Guard. Projected FY2002-2003.

**PROJECT STATUS:** Prototyping/Limited Production. This project was funded in its first year (FY97) for $1M. The acquisition process has begun with specification identification however equipment was purchased in FY97. Goals for FY98 include acquisition of initial equipment, test and complete installation plans for initial platforms. Additional funds will be required in FY99.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.000 | $ 0 | $ 5.000 | $ 10.650 | $ 4.650 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 21.300

**PERFORMANCE AND SAVINGS:** GSB-900 replacement equipment will incorporate new HF techniques/technologies and be capable of communicating using most of the known methods/mediums in the HF frequency range. This will eliminate the need for special function transceivers. This will enable the Coast Guard to effectively communicate with other government agencies, DOD and civilian organizations. New technologies such as Automatic Link Establishment (ALE), Digital Selective Calling (DSC), and high speed HF data transmission will improve Coast Guard communications.

**Cost Benefits**

Tangible:

The Coast Guard achieves significant cost avoidance by operating, maintaining and managing this equipment on a service wide basis, eliminating non-standard Low Power HF installations. Maintenance costs of the current Low Power HF infrastructure will go down as a result of this acquisition and these installations.

Intangible:

Increase management efficiencies by:

- HF installations will be functionally standard with other agencies.
- Consistent infrastructure with other agencies
- Leverage research and development investment by DON/DOD/DISA.

**INITIATIVE ID:** USCGO047

**ORGANIZATION/ENTITY:** USCG/G-OCA

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Drew Pearson, (202) 267-1568

**TITLE OF PROGRAM/PROJECT:** HC-130 Sensor Upgrade

**TYPE:** PSV, PCS

**DESCRIPTION:** Procure and install a palletized system containing a FLIR, SATCOM, and Airborne Tactical Workstation (ATW) on 12 HC-130 aircraft. Modify all other HC-130 aircraft to accept the palletized system.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** Research and/or Development; RFP's issued by G-ACS. Expect contract award by Q1 FY98

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 11.995 | $ 11.659 | $ 0* | $ 0* | $ 0* | $ 0* | $ 0* |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** * Tentative total is $23.654. Total life cycle costs not yet determined due to lack of Operating Expenses (OE) follow-on identification.

**PERFORMANCE AND SAVINGS:** This project will help to bridge known sensor and $C^4I$ gap capabilities and will increase the per flight hour effectiveness of the Coast Guard's HC-130 fleet. Sensor enhanced aircraft have already demonstrated their ability to detect, classify, and sort targets. The increased capability will assist in meeting the Coast Guard's performance goals of Safety, Protection of Natural Resources and Maritime Security.

Specifically, increased technology of drug traffickers and fishery/marine violators amidst unpredictable migrant efforts requires expanded surveillance efforts that have become increasingly inefficient in meeting operational requirements. The HC-130 has the necessary crew and space to operate a FLIR slaved to APS 137 radar, and a palletized tactical work station with real time communications. Combined, this provides real time tactical plots to surface assets while efficiently using available resource hours.

Based on manufacturers and Coast Guard estimates, airborne classification and identification of surface targets will improve significantly. While significant improvements will be realized during daylight operations, the greatest benefits will be realized at night. Current APS-137 targets detected at night smaller than 40 feet can not be classified. This system capability will be able to classify those targets. The ATW and SATCOM will provide the greatest benefit through the ability to transfer real time aircraft radar track data long range to virtually any resource/asset. Twenty-four hour surveillance and search efforts will be available with uniform levels of effectiveness, allowing operational commanders to deploy and program managers to schedule resources with dramatic flexibility.

**INITIATIVE ID:** USCGO048

**ORGANIZATION/ENTITY:** USCG/G-SEA

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR M. D. Hargadon, (202) 267-0196

**TITLE OF PROGRAM/PROJECT:** HC-130 Long Range Search Aircraft AN/APS-135 Side Looking Radar (HC-130 SLAR)

**TYPE:** PSV

**DESCRIPTION:** The AN/APS-135 is an X-band, Side-Looking Airborne Radar (SLAR) used for the detection of ships and boats, and search and rescue and ice patrol in the North Atlantic. Apart from the position of the antennas, the system is virtually identical to the AN/APS-131. The aircraft installation consists of seven main subassemblies: antennas, antenna switching unit, receiver/transmitter, synchronizer, amplifier, recorder/processor/viewer and control unit.

The antenna unit consists of two pods mounted either side of the aircraft to provide an unobstructed view, each containing a 16 ft (4.88m) horizontally polarized slotted wave-guide array. In flight the arrays are yaw-stabilized to preserve the radar picture quality. The remaining equipment is mounted on a pallet inside the aircraft for easy removal. The synchronizer provides radar timing and control functions and, based on inputs from the aircraft inertial navigation system, creates latitude and longitude lines for display on the radar imagery. The receiver/transmitter contains the magnetron and low-noise receiver. The antenna switching unit directs the radiated power to the left or right antenna.

The recorder/processor/viewer contains the components necessary to create the film imagery. Video data is impressed on the film by applying it to two CRTs as the film is pulled across the CRT faces. Typically, each CRT generates an image of the earth's surface on one side of the aircraft. The dry silver film is developed in near real time.

An area of up to 108 nautical miles (200km) on either side of the aircraft can be mapped when both arrays are in use and one can be selected if mapping of only one side is required. A range control determines the width of the target area to be mapped and presented on the photo-radar map. This control has four settings corresponding to 13.5, 27, 54, and 108nm (25, 50, 100, and 200 km) wide scans by each antenna. When used in conjunction with the antenna switch to select either left, right or both arrays, maps corresponding to four standard scales can be presented on the display at 1:250,000, 1:500,000, 1:1 million and 1:2 million. Radar and aircraft operational data is annotated on the film. This data, together with the latitude and longitude printed on the film, helps the measurement of map coordinates for any feature observed on the radar image. The AN/APS-135 was developed under contract to the U. S. Coast Guard and is in service the HC-130H aircraft. A similar SLAR, the AN/APS-131 is used on the HU-25B aircraft.

A FY96 budget request was approved to replace obsolete components of the AN/APS-135 System. The dry silver film, upon which the radar imagery is transposed, was phased out of production in 1996. The budget request includes replacement of the radar signal processor, image processor, radar data recorder, radar set control, and CRT display. A Sensor Data Interface Unit (SDIU) will be developed to receive analog signals from the existing sensor, digitize the signal, and store it in a PC. The ability to down-link the information to a ground station is also a part of the budget request. The same technology will be incorporated in the AN/APS-131 SLAR on the HU-25B.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Approved 1977 AC&I budget request (RCP Number 1022) for initial SLAR installation. A follow-on OE budget request (RCP Number 52.02) was approved in FY98 for system maintenance.

- Milestone 2: An FY96 AC&I budget request (RCP Number 610) was approved to upgrade obsolete components of the AN/APS-135 SLAR System using proven AIREYE Upgrade technology.

- Milestone 3: Due to delays in the AIREYE Upgrade Project, SLAR Upgrade funding was requested to be reprogrammed (reprogramming request 5/97) to complete AIREYE. An FY99 budget request was concurrently submitted to back-fill funding for the SLAR Upgrade Project.

- Milestone 4: Estimated completion for the SLAR Upgrade is 1st QTR FY00.

**PROJECT STATUS:** The Coast Guard has a limited supply of the dry silver film (supply estimated to be exhausted by FY01). Some obsolete components of the system were obtained 7/97 when the U. S. Army declared them excess. The U. S. Army no longer supports the AN/APS-135 SLAR System.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .205 | $ .205 | $ 2.705 | $ .205 | $ .205 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 3.525

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, HC-130 SLAR relates to “output performance” versus “outcome performance”. Use of SLAR for the International Ice Patrol results in savings associated with reduced flight hours (over 50%) to accomplish the mission. Without SLAR, the aircrew would be required to perform a visual search of the operational area.

**INITIATIVE ID:** USCGO049

**ORGANIZTION/ENTITY:** USCG/G-SEA

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CDR R. Yatto, (202) 267-1839

**TITLE OF PROGRAM/PROJECT:** HU-25B AIREYE Remote Sensor System (HU-25B AIREYE)

**TYPE:** PSV

**DESCRIPTION:** The HU-25B AIREYE incorporates multi-sensor surveillance systems which are specially designed for long range detection, surveillance, real-time processing, and recording of mission data. These systems are the AN/APS-131 Side-Looking-Airborne-Radar (SLAR) and the RS-18C Infrared/Ultraviolet (IR/UV) line scanner system.

The SLAR system provides real-time surface and terrain mapping with an automatic data annotation system (ADAS) resulting in a geo-referenced map-like display recorded onto translucent dry silver film. The system radiates a narrow beam RF pulse and receives, amplifies, and detects any target in the returning pulse. The synchronizer generates the SLAR system's timing, latitude and longitude lines and range marks, ADAS data, and film speed signal. The AN/APS-131 also incorporates a built-in-test which is generated from the synchronizer.

Operation of the RS-18C IR/UV line scanner consists of receiving, detecting, and converting infrared and ultraviolet energy into electrical energy. This is accomplished by using a scanner that rotates at a speed of 5,000 rpm (revolutions per minute). Its effective operating altitude ranges from 500 to 35,000 feet, with optimum coverage 1,060 and 5,000 feet.

The RS-18C interfaces with the digital interface unit (DIU) and sensor computer through the scan converter. Data is displayed on the multi-purpose display after computer processing and recorded onto a super VHS recorder.

The RS-18C is controlled via the IR/UV control panel which provides the controls and indicators necessary to operate the IR/UV system and monitor the system's status during operation.

Because of the AIREYE system's age, obsolescence, and problems associated with its supportability, the Coast Guard is in the process of an upgrade. The original system was fielded in the early 1980's and many of the parts are no longer available. Additionally, the dry silver film which the SLAR uses for its display and recording of sensor data is now longer being manufactured.

The upgraded system will reuse the basic SLAR and IR/UV sensors as they are still supportable, but will replace all of the control, display, and recording functionality with state of the art technology. A ruggedized work station will be used with all of the system's controls being via software. The system will feature a PC running Windows NT, 19" monitor, back-lit keyboard, uninterruptable power supply (UPS), redundant array of independent drives (RAID), and a digital handheld camera. The upgraded system will also include a datalink feature which enables the transmission of time critical recorded sensor imagery from the aircraft to compatible work stations on the ground.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES AND DATES:**

- Milestone 1: Approved FY93 budget request for $4.4M
- Milestone 2: Contract awarded to TAMSCO for development September 94
- Milestone 3: First article install completed December 96. Project on hold pending reprogramming of funds to complete software development and integration.
- Milestone 4: Anticipate reprogramming of $2.0M to complete project - December 97. Project completion estimated June 99.

**PROJECT STATUS:** The AIREYE Upgrade Project is currently on hold pending Congressional approval to expand the scope and utilize additional funding. The project reached a work stoppage because funding was exhausted before project completion under a Time and Materials (T&M) type contract.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 2.361 | $ 2.413 | $ .423 | $ .444 | $ .466 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 6.107

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, AIREYE relates to “output performance” versus “outcome performance”. AIREYE is a national asset used to identify and quantify oil spills. It significantly enhances the On Scene Commander’s decision making capabilities by providing near real time information on oil spills. Without AIREYE, the Coast Guard would not be as effective in controlling and containing the environmental damage associated with spills of national significance.

**INITIATIVE ID:** USCGO050

**ORGANIZATION/ENTITY:** USCG/G-OCI

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Richard Harding, (202) 267-6356

**TITLE OF PROGRAM/PROJECT:** Joint Maritime Information Element (JMIE)

**TYPE:** PIM

**DESCRIPTION:** In the mid-1980's, the Coast Guard Intelligence Program entered into a joint venture with the Office of Naval Intelligence (ONI) to improve maritime data sharing. That joint venture resulted in the establishment of the Joint Maritime Information Element (JMIE) program. JMIE is a consortium of government agencies whose business/operations share a common theme - they are involved in maritime operations. The consortium's business is overseen by the JMIE Steering Group (JSG) which is made up of the heads of the consortium's members. As a first effort in improving the sharing of maritime data, the JSG directed that the JMIE Support System (JSS) be developed. The JSS consists of a centralized database maintained on an IBM mainframe computer at the Coast Guard Operations System Center (OSC) in Martinsburg, W.Va. and remote computer workstations at over 37 locations worldwide. JSS users include Coast Guard Intelligence offices, other US Law Enforcement, Intelligence, and Military commands, as well as other US government agencies. The JSS reached Full Operational Capability (FOC) in 1993. By Memorandum of Agreement, the Office of Naval Intelligence functions as the Technical Management Office (TMO), the OSC is responsible for Operations & Maintenance and the Assistant Commandant for Operations (Office of Intelligence) serves as the JMIE Executive Agent.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements

- GOAL 5: Enhance and extend our reputation as the world’s premier maritime service

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.509 | $ 1.509 | $ 1.509 | $ 1.509 | $ 1.509 | $ 1.509 | $ 1.509 | $ 1.509 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 12.072. The costs of acquisition, design and implementation for the JSS were borne by the Office of Naval Intelligence with the funding provided by the Intelligence Community or specific DOD funds in the name of the JMIE consortium. The Coast Guard's responsibility was to fund the O&M at Martinsburg and the operation of the JMIE Executive Agent efforts. The $1.5M for each FY reflects those dollars. No other Coast Guard funds were provided.

**PERFORMANCE AND SAVINGS:** JMIE is unique in that it is the only multi-agency maritime database used and populated by all of the federal agencies with maritime missions. The data is provided by all member agencies and some private sources and assists in regulating industries, enforcing laws, and supporting foreign policy. It supports surveillance and defense of seaward approaches, narcotics interdiction, anti-smuggling initiatives, exclusive economic zone management, regulation of petroleum and hazardous materials shipments, sealift management, and control of technology transfers and international arms shipments. This single source of data has not only proven to be easier for intelligence analysts to handle, but it is also very cost effective because it is a single system with shared costs. JMIE has successfully met its operational goals to pool multi-source data for timely, efficient use; interconnect analytical centers; provide an effective alert mechanism to problematic situations; and coordinate intercommunity intelligence support.. The Coast Guard has used JMIE data to locate drug boats, identify oil spill polluters, sort possible United Nations embargo violators, and track alien smuggling vessels. The Coast Guard receives substantial value because ONI pays most of the associated costs.

**INITIATIVE ID:** USCGO051

**ORGANIZATION/ENTITY:** USCG/G-WR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
David Swatloski, (202) 267-2096

**TITLE OF PROGRAM/PROJECT:** Office of Health and Safety Resource Information System (KRIS)

**TYPE:** PIM

**DESCRIPTION:** KRIS gives G-W the ability to manage the Coast Guard's $250 million annual health care budget. Managers can now measure the performance of Coast Guard clinics and compare it to other forms of health care delivery.

The system is linked with the Personnel Decision System (PDS), Defense Medical Information System, Tri-service CHAMPUS Statistical Database Project, Defense Enrollment and Eligibility Reporting System (DEERS), Clinic Automated Management System (CLAMS), and the non-federal Invoice Processing Systems (NIPS). All of these links allow the gathering and comparing of a large and diverse amount of information.

Hardware will be SWIII and existing minicomputer capacity for database server functions. Software will be part of SWIII bundle.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
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- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Full Implementation of the Occupational Medical Surveillance Evaluation Program (OMSEP) 9/98
- Milestone 2: Full integration of NIPS into KRIS 9/98
- Milestone 3: Headquarters CLAMS to KRIS 9/98
- Milestone 4: Re-engineer NIPSII to NIPSIII 9/99
- Milestone 5: CLAMSII Distribution 9/99
- Milestone 6: KRIS Re-engineering to Designer 2000 9/00

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.200 | $ .485 | $ .485 | $ .485 | $ .485 | $ .485 | $ .485 | $ .485 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 4.595

**PERFORMANCE AND SAVINGS:** The benefits of this system are that managers will have the information they need to better manage the Coast Guard Health Care process and reduce the annual rise in the Health Care budget. Managers will also be able to better analyze accident statistics and make recommendations to reduce incidents.

**INITIATIVE ID:** USCGO052

**ORGANIZATION/ENTITY:** USCG/G-LPD

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
(N/A - IT position vacant at current time)

**TITLE OF PROGRAM/PROJECT:** Legal Automated Workstation System (LAWS)

**TYPE:** PIM

**DESCRIPTION:** LAWS is an Office Automation system which has replaced assorted nonstandard systems at each of the field legal offices and the Office of Chief Counsel. LAWS is a package of hardware and software components from the Coast Guard's Standard Workstation contract. In addition, there is a case and time management database and on-line legal research services.

The equipment and software is in place and operational. Funding will be used for commercial ADP time, software maintenance, documentation, training, support personnel, database programming and conversion to the next Coast Guard Standard Workstation. The first phase of the LAWS project replaced assorted non-standard systems at each of the Coast Guard's legal offices with hardware and software from the Standard Workstation II contract.

The LAWS equipment and software was purchased from the Coast Guard's Standard Workstation 11 contract and is, therefore, compatible with the rest of the agency. LAWS is one of 18 "Mission Essential Applications" to be converted for use on Workstation III, as part of the servicewide transition plan.

When the Legal Program transitions to the Coast Guard's Standard Workstation III, it will benefit from the improvements in the newer "open system" architecture. It is likely that additional improvements in effectiveness and efficiency will be possible in that environment. Such possibilities will be evaluated when the new system is in place.

If not funded, it would be necessary for attorneys to revert back to manual processes. Turnaround times for legal materials would increase significantly. A large number of additional support personnel would be required. Attorneys and their supervisors would be less effective in managing individual and office workload. There would be no electronic sours of workload data for measurement by the program manager. Legal research would be more time consuming, possibly less thorough, and possibly inconsistent.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .637 | $ .442 | $ .451 | $ .466 | $ .466 | $ .466 | $ .466 | $ .466 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 3.860

**PERFORMANCE AND SAVINGS:** The office automation, database and legal research capabilities described above allow the Legal program to more effectively and efficiently provide advice and support to the persons responsible for directing and managing Coast Guard programs and resources.

Overall, LAWS benefits the Coast Guard by helping the Legal program process an increasing number of legal matters with a continually decreasing number of support personnel. LAWS assists attorneys and their supervisors in managing individual and office workload, thus, improving the timeliness and efficiency of service delivery. The on-line legal research capability increases attorney productivity by providing faster, more thorough and more reliable research results than manual methods.

LAWS has made it possible for the Legal Program to process an increasing number of legal matters with a continually decreasing number of support personnel. LAWS assists attorneys and their supervisors in managing individual and office workload, thus improving the timeliness and efficiency of service delivery. In Fiscal Year 1996, a version of the LAWS database was distributed which extracts workload data for use at Headquarters. For the first time, data is available for measurement purposes, such as that

required by the Government Performance and Results Act and internal agency measurement initiatives.

The on-line legal research capability is provided through a Department-wide contract and is used by all DOT agencies. Because it is centrally managed, the charges for legal research are significantly less than the rates for commercial customers. Also, a second, more expensive service was terminated in Fiscal Year 1994.

**INITIATIVE ID:** USCGO053

**ORGANIZATION/ENTITY:** USCG/G-OPL

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Henry Leeper, (202) 267-0435

**TITLE OF PROGRAM/PROJECT:** Law Enforcement Information System II (LEIS II)

**TYPE:** PDA

**DESCRIPTION:** LEIS II is a client-server data system with links to internal (Coast Guard) and external law enforcement (LE) databases. LEIS II provides tactical LE information to field units on a near real-time basis. It also provides the fundamental system for standardization and automation of the collection and retrieval of Coast Guard LE data.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.289 | $ 1.664 | $ 1.518 | $ 1.519 | $ 1.521 | $ 0 | $ 0 | $ 0 |

Somewhere by the FY-00, FY-01 time frame, LEIS II will be re-engineered as part of the Marine Information for Safety and Law Enforcement (MISLE) project and LEIS II as a separate entity will probably disappear.

**INITIATIVE TOTAL LIFE CYCLE COST(in millions):** $ 7.511

**PERFORMANCE AND SAVINGS:** In a time of diminishing resources, it is imperative that the Coast Guard have the ability to target those resources in the most efficient manner. For example, there are typically far more fishing vessels in any given fishing area than the Coast Guard can board. With LEIS II, the operational unit is able to identify those vessels that have not been boarded recently, have been boarded and have had problems, or those that have been boarded and had no problems. Obviously, repetitive boardings of the last group is at best a waste of very valuable resources and an ineffective way of managing a program. So while there may be no cost savings per se, the ability to make efficient and effective decisions is crucial.

**INITIATIVE ID:** USCGO054

**ORGANIZATION/ENTITY:** USCG/G-OPN

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Frank Parker, (202) 267-0358

**TITLE OF PROGRAM/PROJECT:** Local Notices to Mariners Automation (LNM) - Phase II

**TYPE:** PIM

**DESCRIPTION:** The U.S. Coast Guard has a statutory and international treaty responsibility to disseminate important safety information, concerning the state of U.S. waterways to the maritime public (commercial, military, recreational). To meet this responsibility, each of the nine nationwide Coast Guard districts issues a weekly printed publication titled *Local Notice to Mariners (LNM)*. The current process used to compile and disseminate LNMs is predominately manual. Four separate non-compatible aids to navigation information [legacy] systems share a large percentage of data by manually keying data between systems. The information is used to create the LNM which provides important safety information to a broad spectrum of mariners. This information must be accurate. However, because of the need to re-key information between systems, the information contains errors.

Additionally, costs for printing and mailing continue to rise. At the same time, the demand for electronic access to LNM data continues to rise. This project will lead to the automation of the collection of aids to navigation information and the dissemination of the LNM, as well as providing for internal and external on-line access to aids to navigation and navigation safety information. This process represents a system of data input, data management, and data output of time-sensitive navigation information that can be supported by a computer database architecture. The Coast Guard has contracted for the phased development of a system that will automate and integrate the capturing of the original input data, provide a means for better data management, and consider organizational restructuring and linkage to other related processes.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices

- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

1. Software Development .....January 99
2. Acceptance Testing..... March 99
3. Coast Guard-wide Installation..... April 99

**PROJECT STATUS:** Research and/or Development

**PROJECT COST PER YEAR(in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 1.500 | $ .500 | $ .150 | $ .150 | $ .150 | $ .150 | $ .150 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.750

**PERFORMANCE AND SAVINGS:** This project started as a result of a DOT Inspector General (IG) audit that recommended charging a subscription fee for the LNM. After discussions with the IG, the IG gained a better understanding of the LNM and it was agreed that this project would achieve the same objective of the IG recommendation, without creating a financial disincentive for use of critical navigational safety information by the American public. The IG audit did not consider the manual, labor intensive internal processes required of the Coast Guard in producing the LNM document. The current LNM printing and mailing costs are approximately $1.0 million annually. The annual personnel costs required to support this manual process are approximately $2.2 million.

The LNM process represents a system of data input, data management, and data output of time-sensitive navigation information. This project is an opportunity to leverage technology, resulting in operational and administrative efficiencies, as well as improving service to the maritime public. The project supports (1) a centralized database; (2) multi-user access; (3) source/on-line updating; (4) user implemented database query capability; and (5) database product and report retrieval/delivery capability to any unit across and external to the Coast Guard.

As a result, such a system will provide opportunities to/for: meeting DOT and Congressional mandates for reducing costs of the LNM, provide a means for better data management by capturing original input data, billet reductions resulting from operational and administrative efficiencies gained due to elimination of redundant processing, and provide the capability to disseminate the LNM via the Internet thereby reducing or eliminating the costs of printing and mailing LNM.

**INITIATIVE ID:** USCGO055

**ORGANIZATION/ENTITY:** USCG/G-OCC

**ORGANIZATIONAL POINT OF CONTACT:**
Steve Bednar, (202) 267-0482

**TITLE OF PROGRAM/PROJECT:** Loran-C Operations Information System 2 (LOIS2)

**TYPE:** PIM

**DESCRIPTION:** The initial LOIS programs were developed for the Hewlett Packard HP65 hand-held calculator. These programs were stored on small magnetic cards. Because of register and memory limitations, data entry and processing was slow. Multi-day calculations were done by entering one data point at a time and recursively calculating statistics. In addition, some programs were developed for the HP9825, which is still in use at some locations. This calculator added limited plotting and graphing capabilities to the basic calculations. As there was no archiving capacity or networking capability, long term trend analysis was impractical, with the exception of hand-done plots. Data entry had to be done each time it was to be used. The only records were in paper form.

In June of 1990, Synetics, Inc. was awarded a contract to design and implement LOIS2 to run on the Coast Guard Standard Workstation. During the development, a number of problems were encountered by the contractor. Despite these problems, Synetics proceeded with software development and produced the initial LOIS prototype during the summer of 1991. This prototype was subsequently installed by user personnel at LORSTA Seneca for evaluation. They were never able to get the prototype to work properly and after several weeks the effort was abandoned by personnel at Seneca.

In early 1992 a project was initiated by the G-N IRM staff to assess the LOIS2 project and make recommendations on how to best proceed. It was clear from this review that the LOIS2 requirements were never really defined and the Synetics developed software could not be salvaged. A new LOIS2 development effort was begun by the G-N IRM staff in Sept 1992. A detailed functional description based upon the analysis and interviews which were conducted was used to develop a LOIS2 prototype. After further fine tuning by G-NRN and the field users, the LOIS2 software was ready to be tested in a LORAN chain or chains.

The Northeast Chain was selected as the first beta site. This beta test was the first opportunity to really exercise the system and discover any problems. While the system was not overly complex, watchstanders at most Loran stations did not have the background or technical expertise to install the software and ensure that it was configured properly. Most of these stations did not even have system managers. The continued success of this project relied heavily on how well the software beta test was received in the field. While formal training was given by the contractor at two sites, many of the users in

the Beta test did not have the opportunity to get this training. A G-N IRM staff representative was able to address any problems using the LOIS2 software helping to ensure its acceptance by the users during the LOIS2 Beta test.

After the successful completion of the Beta test, an installation procedure was developed to allow station personnel to install the LOIS2 system as part of the implementation phase of the project.

LOIS2 is currently installed and running at 32 Loran Stations.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Acquisition: Requirements Analysis and Detailed Design completed 9/1992

- Development: Prototype completed 5/1993; Beta Test began 1/1994;Beta test completed 11/1994

- Implementation: Production system implementation began 4/1995; Implementation finished 12/1995

- Maintenance: OSC Hotline support began 7/1995

**PROJECT STATUS:** System Deployment and System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .083 | $ .130 | $ .250 | $ .150 | $ .150 | $ .150 | $ .150 | $ .150 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.213

**PERFORMANCE AND SAVINGS:**

One of the Coast Guard's strategic goals in support of GPRA is Mobility. One of the Performance goals supporting the Mobility concept is to identify, quantify and reduce targeted sources of delay to commercial mariners. Maintaining the Loran-C is a Radionavigation Service that enables Mariners and Pilots to navigate.

LOIS2 has enabled program personnel, for the first time, to adequately respond to various inquiries about the performance of the Loran-C system. In the past , the FAA had requested data on momentaries which program personnel could not provide.

As Loran-C staffing levels have been reduced over the years, the number of personnel with a thorough understanding of important Loran operational concepts has diminished greatly. LOIS2 system was designed to serve as a tool for station CO's and Coordinator of Chain Operations (COCOs) to identify problem areas at an early stage. This capability has helped improve performance of the Loran-C system.

**INITIATIVE ID:** USCGO056

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Eugene Vogt, (202) 267-1348

**TITLE OF PROGRAM/PROJECT:** VHF-FM DES Transceiver Radio Replacement Project (MCX-1000 Replacement)

**TYPE:** PCS

**DESCRIPTION:** This project intends to replace MCX-100 and MCX-1000 panel mounted VHF-FM Digital Encryption Standard (DES) radios. MCX-1000 radios are no longer manufactured and are reaching the end of their serviceable life. Due to the diminishing supply of spare parts, these radios are becoming more difficult and costly to support. Federal mandates to transition to narrower bandwidth channels and optimize spectrum usage also drive the need to replace these radios.

These radios are the primary means of operational short range communications at all units from 378' WHEC cutters to small boats as well as many shore units. This procurement is closely linked with the MCX-300R procurement. Poor voice quality of existing radios negatively impacts command and control. The identified Astro Digital Spectra (MCX-1000 replacement) radio is interoperable with existing handheld and panel mount transceivers. In addition, the Astro Spectra (MCX-1000 replacement) radio provides improvements in operational range with protected communications and enhanced voice clarity when utilized with the Astro Saber (MCX-300 replacement) handheld radios.

This project has identified a replacement radio and begun procurement. Fielding plans to provide initial procurement replacement radios to those units with the most dire operational are in development.

These radios provide vital protected communications during law enforcement boardings and other operations. These communications between deployed boarding or Law Enforcement teams and small boats require this protection. A lack of funding will preclude protected radio communications wherever and whenever needed.

This communications equipment directly supports all Coast Guard law enforcement operations using multiple, mobile teams. Examples include drug interdiction sweeps of suspect vessels and alien migrant interdiction operations. A planned, coordinated procurement will optimize capability and minimize costs.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.

- GOAL 6: engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure and safety.

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Complete market survey - Completed 7/97
- Deliver first installment of radios - Projected 2/98
- Prototype Installations - Projected 7/98
- Production Installations - Projected 12/98-03

**PROJECT STATUS:** Prototyping/Limited Production. Initial testing and evaluation completed. Fielding plan development, initial implementation, install and deploy system, continue procurements.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .350 | $ 1.700 | $ 2.000 | $ 2.000 | $ 1.900 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 7.950

**PERFORMANCE AND SAVINGS:** This initiative improves vital communications equipment and systems to maintain or improve operational mandated security. Procurement and maintenance costs will be minimized now and in the future by using COTs equipment purchased under contract, with warranties. Under the Government Performance and Results Act, MCX-1000 relates primarily to "output performance." The project ensures the Coast Guard makes maximum use of the lowest cost maritime radios with protected communications currently available and standardizes equipment to meet the demands of operational users. The project provides for protected mobile communications for Coast Guard short range Command & Control including voice to all units, deployed teams, boats and cutters underway.

**Cost Benefits**

Tangible:

The Coast Guard achieves the lowest price currently available protected mobile maritime communications system while purchasing COTS equipment from federal contracts and schedules. Savings will be realized by reducing non-standard installations and being able to provide maintenance and training support for one standard system.

Intangible:

Increase reliability, performance, and multi-mission capability by:

- Protected communications to teams from cutters underway.
- High reliability protected short range communications.
- Flexible use meeting federal mandate for spectrum use.
- Interoperable with existing equipment.
- Modern, standards based electronics.
- Consistent procurement strategy and support plan.
- Reduced risk by extended range, clearer voice communications.
- More precise communications and flexible control of teams.

**INITIATIVE ID:** USCGO057

**ORGANIZATION/ENTITY:** USCG/G-SCT, TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Eugene Vogt, (202) 267-1348

**TITLE OF PROGRAM/PROJECT:** Handheld VHF-FM DES Radio Replacement Project (MCX-300 Replacement)

**TYPE:** PCS

**DESCRIPTION:** This effort will replace MCX-300 handheld VHF-FM Digital Encryption Standard (DES) radios. MCX-300 radios are no longer manufactured. Replacement is being done on an as needed basis, increasing cost. This strategy also fails to gain the full advantages available in improved performance and increased protected communications range provided by the new radios. Further, poor voice quality of existing radios negatively impacts command and control.

With over 3,000 radios in inventory, the Coast Guard Engineering Logistics Center (ELC) is not budgeted for a massive replacement of these radios. As the failure rate increases with the radio's increased age and reduced maintenance supportability, a planned replacement has become more cost effective. This project has identified a replacement radio and begun procurement of the Motorola Astro Saber One (ruggedized). Fielding plans to provide initial procurement replacement radios to those units with the most dire operational are in development.

These radios provide vital protected communications during law enforcement boardings and other operations. These communications between deployed boarding or Law Enforcement teams and small boats require this protection. A lack of funding will preclude protected radio communications wherever and whenever needed.

This communications equipment directly supports all Coast Guard law enforcement operations using multiple, mobile teams. Examples include drug interdiction sweeps of suspect vessels and alien migrant interdiction operations. A planned, coordinated procurement will optimize capability and minimize costs.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure and safety.

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Complete market survey - Completed 7/97

- Deliver first installment of radios - Projected FY98, Planned 8/97

**PROJECT STATUS:** System Deployment. The project is on schedule to begin delivering anticipated performance benefits required to support the needs of underway cutters and boarding teams. Over 1,000 radios have been being procured and fielded to provide needed communications links in support of operations.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 2.480 | $ 2.220 | $ 2.300 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST(in millions) :** $ 7.000

**PERFORMANCE AND SAVINGS:** This initiative improves vital communications equipment and systems to maintain or improve operational mandated security. Procurement and maintenance costs will be minimized now and in the future by using COTS equipment purchased under contract, with warranties. Under the Government Performance and Results Act, MCX-300 relates primarily to "output performance." The project ensures the Coast Guard makes maximum use of the lowest cost maritime radios

with protected communications currently available and standardizes equipment to meet the demands of operational users. The project provides for protected mobile communications for Coast Guard short range Command & Control including voice to deployed teams and boats from cutters underway.

**Cost Benefits**

Tangible:

The Coast Guard achieves the lowest price currently available protected mobile maritime communications system while purchasing COTS equipment from federal contracts and schedules.

Intangible:

Increase reliability, performance, and multi-mission capability by:

- Protected communications to teams from cutters underway.
- High reliability protected short range communications.
- Flexible use meeting federal mandate for spectrum use.
- Interoperable with existing equipment.
- Modern, standards based electronics.
- Consistent procurement strategy and support plan.
- Reduced risk by extended range, clearer voice communications.
- More precise communications and flexible control of teams.

**INITIATIVE ID:** USCGO058

**ORGANIZATION/ENTITY:** USCG/G-SCT; TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Charles Pugh, (202) 267-1252

**TITLE OF PROGRAM/PROJECT:** Message Interface, Transition, and Automation Project (MITAP)

**TYPE:** PCS

**DESCRIPTION:** MITAP will keep the Coast Guard Standard Semi-Automatic Message Processing System (SSAMPS) operational until the Defense Messaging System (DMS) is fielded. MITAP is focused on the inter-connectivity between the Coast Guard Standard Workstation III (SWIII) and the record message system existing on the CGSWII. MITAP will develop and test the integration plan for the entire Coast Guard.

The Coast Guard has a requirement to maintain a record communications system for operational needs and administrative functions. The Coast Guard also has a requirement to maintain record message connectivity with other federal agencies and DOD. DMS is the future record message system for DOD.

The specific technology required is services. The funds will be used to outsource for contractors' expertise and services in providing record message connectivity for the Coast Guard.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world’s premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure and safety.

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Transition of record messages to SWIII - Completed 3/97

- Milestone 2: Exchange unclassified record messages with DMS - Projected 6/98

- Milestone 3: Exchange classified record messages with DMS - Projected 3/99

- Milestone 4: Implement a record message system across the CG that is able to exchange messages of all classifications with DMS. Projected 11/99

**PROJECT STATUS:** Prototyping/Limited Production. Project has successfully integrated the message exchange functions between the X.25 based CGSWII and the Internet Protocol (IP) based SWIII. Future efforts to integrate SWIII e-mail functionality into the DMS architecture are targeted for FY98.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .425 | $ .435 | $ .450 | $ .465 | $ .480 | $ .500 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.755

**PERFORMANCE AND SAVINGS:** The Coast Guard will continue to realize savings in terms of dollars and labor hours. Where it once took twelve individuals to staff a communications center, it now takes five (based on a 24-hour watch). The Coast Guard will continue to benefit with consolidation projects and by giving more functionality and capabilities to the end user. The project will put automation capabilities at the lowest possible level in the Coast Guard.

**INITIATIVE ID:** USCGO059

**ORGANIZATION/ENTITY:** USCG/G-MRI

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Karen Casey, (202) 267-0790

**TITLE OF PROGRAM/PROJECT:** Merchant Mariner Licensing & Documentation System (MMLD)

**TYPE**: PIM

**DESCRIPTION:** The Merchant Mariner Licensing and Documentation (MMLD) system automates the various marine licensing and documentation processes including recordkeeping of merchant mariners of the United States. The records include the documentation, license and employment information on each U.S. mariner and World War II Merchant Mariner Veteran's Status information (DD 214 program). The manual system which has been in effect since 1937, was extremely labor intensive and provided very slow response to inquiries for information from these records. An automated system for Coast Guard Headquarters, the Merchant Mariner's Documentation (MMDOC) system has been on line since 1991 and has improved our ability to respond to the public with information needed to assist mariners. In 1996, MMDOC and MMLD were combined into one national database to be used by all Regional Examination Centers (RECs). The database is updated daily with new/additional information on mariners to include name, address, and social security number; date/place and rating of a Merchant Mariner's Document (MMD) LICENSE; and the location of the record. The database is maintained on a SUN system; the program is written in Progress and currently accessed through Coast Guard Standard Workstation II and, after field testing, Standard Workstation III; the communications between the field units and the central site is through SIRIUS software. It is presently located and maintained at a Coast Guard contractor's site in Alexandria, VA. As part of the MMLD system, the Coast Guard developed a Mariner's Tracking system which will provide valuable information to the Maritime Administration and Department of Defense for the manning of merchant vessels in times of national emergency. The information in MMLD is also used in Coast Guard investigations of marine casualties, violations, and negligence; in Department of Justice litigation; in Department of Defense manning of the Ready Reserve Fleet in time of national emergency; and to provide information to mariners and unions regarding retirement benefits. An element of MMLD is the Mariner's Identification (MID) system which replaces the paper-based Merchant Mariner's Document (MMD) with a plastic credit card style ID with magnetic stripe to allow automating a 60 year old manual reporting system. This is a micro computer based ID card production (with camera and card printer) with COTS equipment with an interface developed to tie the system to CGSW. The system is used on the national and local level.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security.

**DOT GOALS SUPPORTED**:

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless and efficient, and offers flexibility of choices

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1,2,3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance. MMLD is in transition to a new platform at OSC Martinsburg, WV.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.182 | $ .704 | $ .733 | $ .733 | $ .733 | $ .733 | $ .733 | $ .733 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 6.284

**PERFORMANCE AND SAVINGS:** This initiative has ensured that the Coast Guard is in complete compliance with the statutory requirements of maintaining merchant mariner documentation, license, and sea service (employment records), to include providing mariner's documents and/or records information in a timely manner. when requested. At this time, there is no savings to be realized.

**INITIATIVE ID:** USCGO060

**ORGANIZATION/ENTITY:** USCG/G-OCA

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Drew Pearson, (202) 267-1568

**TITLE OF PROGRAM/PROJECT:** Sensor Upgrade for 3 Maritime Patrol Aircraft (MPA)

**TYPE:** PSV, PCS

**DESCRIPTION:** Procure and install a FLIR, Airborne Tactical Workstation (ATW) and surface search radar in 3 MPA.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage
- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** Mission Need

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 0 | $ 9.000 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** Tentative total is $ 9.000 Total life cycle costs not yet determined due to lack of Operating Expenses (OE) follow-on identification.

**PERFORMANCE AND SAVINGS:** This project will help to bridge known sensor and $C^4I$ gap capabilities and will increase the per flight hour effectiveness of the Coast Guard's 3 MPA aircraft in the FY99 budget.. Sensor enhanced aircraft have already demonstrated their ability to detect, classify, and sort targets. The increased capability will assist in meeting the Coast Guard's performance goals of Safety, Protection of Natural Resources and Maritime Security.

**INITIATIVE ID:** USCGO061

**ORGANIZATION/ENTITY:** USCG/G-MRI

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Carmen Colon, (202) 267-0388

**TITLE OF PROGRAM/PROJECT:** Marine Safety Information System (MSIS)

**TYPE:** PIM

**DESCRIPTION:** The primary purpose of the Marine Safety Information System (MSIS) is to build safety performances histories of vessels and involved parties. MSIS is needed as a decision support tool for the Commercial Vessel Safety program. Data collected by this system is used to provide the analytical capabilities identified under the National Performance Review for process measurement to improve the Directorate's business practices. Hardware used includes—

Prime - Mainframe
Primos - MSIS Operation System
Total - Database Management System Software
CTOS - Standard Workstation O/S
X.25 -Telecommunications

This system, MSIS, is essential to national or international missions or programs. This fully operational system is in its final stages of its life cycle and in the process of being replaced. The replacement system was identified by G-M Strategic IRM Plan (SIRMP).

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance. MSIS is in the final stages of its life cycle and in the process of being replaced by the Marine Safety Network (MSN).

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 3.888 | $ 3.615 | $ 3.465 | $ 3.265 | $ 1.875 | $ 1.875 | $ 1.875 | $ 1.875 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 21.733

**PERFORMANCE AND SAVINGS:** The performance of MSIS ensures the management of Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Oil Pollution Act (OPA) funds. Provides data pertaining to inspection of vessels, facilities, equipment, mariners, schools, cargo operations, containers, vessel plans to assure compliance with federal laws, treaties, regulations, and certification. Also, the performance of MSIS ensures the documentation of collections and accounts for user fees mandated by Congress as offset to Coast Guard annual appropriations. At this time, savings cannot be factored into MSIS.

**INITIATIVE ID:** USCGO062

**ORGANIZATION/ENTITY:** USCG/G-SEN

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Terry Prokes, (410) 762-6909

**TITLE OF PROGRAM/PROJECT:** Naval Engineering - Technical Information Management System (NE-TIMS)

**TYPE:** PIM

**DESCRIPTION:** The U.S. Coast Guard, Naval Engineering Program has identified a lack of management control of technical documentation. Studies have been conducted by internal working groups and Contractors to delineate the problems that exist in acquiring technical documentation, e.g., the lack of standards for content and format, lack of quality assurance procedures, and difficulty in managing this documentation. Improvements are needed in the systems that organize the documentation, index it in a database, provide for a feedback mechanism, and update the data.

The Coast Guard has determined that a Technical Information Management System (NE-TIMS) is required to allow engineering and support personnel to manage, access, and use technical information under an efficient automated process. Such a NE-TIMS will allow engineering and support personnel to use technical information in a timely manner, with accurate, current data and allow improvements in the cost of operations.

NE-TIMS will consist of an electronic data base with associated hardware and software for use by engineering and support personnel to manage, access and distribute technical information for Coast Guard hull, mechanical, electrical, ordnance and electronic equipment and systems. The system will be designed to cover four basic areas of technical information: 1) Technical publications, 2) Drawings, 3) Provisioning technical documentation, and 4) General reference library. It will allow user access/interface to the system from the Coast Guard SWIII using the Microsoft Windows NT operating system. Use commercial (off-the-shelf) software and hardware and standard commercial "middle of the road" specifications for file formats and document conversion.

The system will be designed to provide for the electronic import and export of data to and from commercial and Coast Guard software applications such as Supply Center Computer Replacement (SCCR), Fleet Logistics Systems (FLS) and CM-Plus.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Feasibility Study - Requirements Analysis and System Specifications (Completed 1/97).

- Milestone 2: Rapid Application Development, Testing, Deployment and Training (Start 9/97 with estimated completion 9/98).

- Milestone 3: Fully Functional System (9/98)

**PROJECT STATUS:** Prototyping/Limited Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .765 | $ .535 | $ .095 | $ .095 | $ .095 | $ .095 | $ .095 | $ .095 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.870

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, NE-TIMS relates to "output performance" versus "outcome performance." That is, NE-TIMS will be used to manage and distribute the technical information necessary to maintain the various Coast Guard operational platforms that perform the functions associated with the Strategic Goals of the draft FY99 Coast Guard Performance Plan. These goals include Safety, Protection of Natural Resources, Mobility. Maritime Security and National Defense.

**Cost Benefits**: Once deployed, NE-TIMS is expected to meet Coast Guard needs well into the 21st Century. During the system's life-cycle certain tangible and intangible benefits can be realized as the system evolves.

Tangible:

Annual Cost Avoidance's Identified: $240,316.00 (Note 1)
Cost Saving for future Acquisition, Construction & Improvement (AC&I) appropriation Contracts: $800,000.00 (Note 2)

Note 1: Annual cost avoidance's will be reinvested in technical information to maintain NE-TIMS and improve the quality of technical information.

Note 2: Example of potential saving on existing AC&I contract for the construction of CGC Healy if NE-TIMS were fully functional today. Amount of savings will depend on contract requirements/size.

Intangible:

Increase management efficiencies by:

- allowing user access to most current information.
- reducing the amount of time required to process and distribute technical information
- eliminating the need for paper management records.
- allowing existing resources to spend more time performing critical tasks.

**INITIATIVE ID:** USCGO063

**ORGANIZATION/ENTITY:** USCG/National Pollution Funds Center

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Jan Lane, (703) 235-4716

**TITLE OF PROGRAM/PROJECT:** National Pollution Funds Center Expert Management Information System (NEMIS)

**TYPE:** PIM

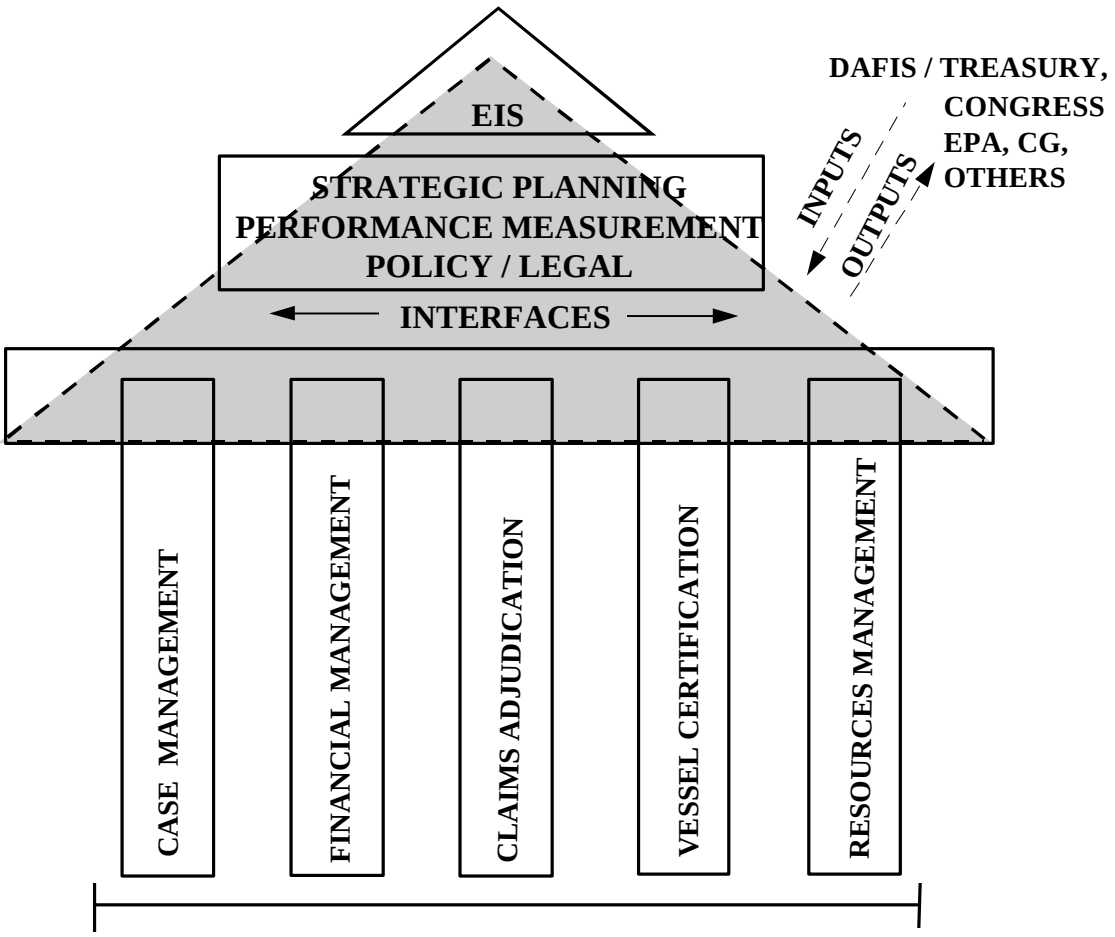
**DESCRIPTION:** Established in 1991, the National Pollution Funds Center's (NPFC) principal mission is to administer the financial responsibility provisions in Title I of the Oil Pollution Act of 1990. NPFC administers the Oil Spill Liability Trust Fund (OSLTF) that supports OPA activities, and the Coast Guard portion of the Superfund that supports the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). These laws deal with liability, compensation, and other fiscal matters stemming from threatened or actual oil or hazardous substance releases. To meet these ends, the NPFC, in accordance with OPA, CERCLA, and other pertinent laws and regulations, executes programs to accomplish its principal objectives: provide funding to permit timely removal actions; provide funding to initiate Natural Resource Damage assessments; compensate claimants who demonstrate that certain damages were caused by oil pollution; recover pollution costs and damages incurred by the Fund from responsible parties; and certify the financial responsibility of vessel owners and operators. NPFC and the services it renders receive intense scrutiny by Congress, GAO, OMB, DOT (especially the OIG), Responsible Parties, their guarantors, the shipping and oil industries, other federal agencies, States, claimants, On-Scene Coordinators, and other internal and external customers.

NPFC's Expert Management Information System (NEMIS) is the overarching IRM system, under development, which both supports independently and integrates the business lines of NPFC. It provides the platform by which case team members can interactively participate during the prosecution of pollution cases. It provides a system for the management of the vessel certification function and the adjudication of third party claims. NEMIS provides the platform for NPFC's intranet by which all NPFC employees have access to NPFC's Strategic Business Plan, internal Standard Operating Procedures (SOPs), Coast Guard and NPFC instructions, executive information, policy and legal guidance, and other shared data. It permits management to measure and analyze statistics for the purposes of internal and external reporting, IG audit preparation and workload reallocation and distribution. It provides the tools through which GPRA measurements and progress toward GPRA goals can be measured and evaluated; tools which are critical to accomplishing our Total Quality Initiatives, especially for providing superior customer service and continuous process improvement.

The scope of NEMIS is significant in that it supports NPFC's management of the billion dollar Oil Spill Liability Trust Fund and every source of income and expense coming into and out of the Fund. Since 1990, the NPFC has managed income into the Fund totaling $1.8 billion from five primary sources: the $.05 per barrel oil tax, fines and penalties, interest on Treasury investments, transfers from existing funds, and over $71 million in recoveries from responsible parties. The NPFC also provided oversight over $1.2 billion in expenditures from the Fund from FY90 through FY97 to date including appropriations and Emergency Fund expenditures. In addition, the NPFC has adjudicated over 5200 claims presented to the Fund totaling $261.2 million (including $189.9 million in claims payments) and collected over $3.9 million in fees for Certificates of Financial Responsibility.

Over the last two years, NPFC has been upgrading its IRM capabilities by incorporating a relational database software application (ORACLE) into the various functional areas of NEMIS. Each of the NEMIS modules and system-wide capabilities is in a different phase of development. The **NEMIS architecture** is comprised of the following *business modules* and *system-wide capabilities*:

| ***Business Modules*** | ***System-wide Capabilities*** |
|---|---|
| - Case Management Information System | - NPFC Intranet/Executive |
| - Financial Management | - Workflow and Imaging |
| - Claims Adjudication | - Internet/Electronic Commerce |
| ■ Vessel Certification | - DBA and Ongoing Applications Support |
| ■ - Resource Management | |


EIS
STRATEGIC PLANNING
PERFORMANCE MEASUREMENT
POLICY / LEGAL
INTERFACES
DAFIS / TREASURY,
CONGRESS
EPA, CG,
OTHERS
INPUTS
OUTPUTS
CASE MANAGEMENT
FINANCIAL MANAGEMENT
CLAIMS ADJUDICATION
VESSEL CERTIFICATION
RESOURCES MANAGEMENT

NEMIS is being developed in coordination with G-CFP and G-S to ensure consistency with the Coast Guard's long-term financial and information system goals. The goal of the last phase of systems development is to expand the capacity of NEMIS by integrating it with an ORACLE relational database management system, which is being adopted as the Coast Guard (G-CFP) standard for financial systems management. NPFC's approved AIS plans, submitted in 1991 and 1996, outline the ultimate system goal for NEMIS -- an integrated IRM system capable of meeting the rigorous auditing and reporting requirements of the CFO Act and supporting the business processes of each of NPFC's business lines.

**OA/OST GOALS SUPPORTED:**

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential.

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and other flexibility of choices.

- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

Each NEMIS module is in a different phase of development with some modules near completion and others in the early stages of development. The following is a summary of the status of the acquisition, development and implementation of each NEMIS module:

1. CASE MANAGEMENT

The NEMIS Case Management module is the focal point for all pollution funding and billing activity. It provides the platform by which multi-disciplinary case team members jointly access individual case files, enter financial data, create chronological logs on actions taken, and provide templates for debt collection, payment and follow-up. The current Lotus Notes system is not capable of meeting NPFC's growing information management requirements or producing reliable accounting information in accordance with CFO requirements. The current system is being integrated to an ORACLE Project Accounting System which is part of the suite of ORACLE Financials with direct interoperability with ORACLE Accounts Receivable and General Ledger applications, also being implemented at NPFC, and the standard recently adopted by the CG for financial management systems.

2. FINANCIAL MANAGEMENT

The Financial Management module in NEMIS is responsible for tracking and reporting on all funds movement in and out of the Oil Spill Liability Trust Fund (OSLTF) and the CG's use of Superfund. It must accurately account for all pollution fund spending and receivables, and perform a number of financial management functions in accordance with CFO requirements. The current system is being integrated to ORACLE Accounts Receivable and General Ledger applications with direct interoperability with the ORACLE Project Accounting application being implemented as the NEMIS Case Management Module. They are part of the suite of ORACLE Financials recently adopted by the CG as the standard for financial management systems.

The Case Management and Financial Management modules are being implemented together because they are interdependent. ORACLE Accounts Receivable, General Ledger and Project Accounting commercial off-the-shelf (COTS) Financial Systems are being integrated into the existing Lotus Notes Case Management system to ensure successful management of all financial data in accordance with DOT IG, CFO Act, Debt Collection Act, and FMIA requirements. The financial systems are linked electronically with the Lotus Notes groupware, DAFIS, FINCEN, Treasury and financial institutions for cash collection through lockbox. All three ORACLE systems went into production on 06 August 1997.

| **Project Accounting** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 10/96 | 12/96 |
| Solution Design | 11/96 | 02/97 |
| Build | 12/96 | 09/97 |
| Testing | 03/97 | 09/97 |
| Implementation/Data Conversion | 12/96 | 09/97 |
| Custom Reports | 03/97 | 09/97 |
| Training | 06/97 | 09/97 |

| **Accounts Receivable** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 08/96 | 08/96 |
| Solution Design | 08/96 | 08/96 |
| Build | 09/96 | 08/97 |
| Testing | 04/97 | 08/97 |
| Implementation/Data Conversion | 01/97 | 09/97 |
| Documentation | 02/97 | 09/97 |
| Custom Reports | 03/97 | 09/97 |
| Training | 03/97 | 09/97 |

| **General Ledger** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 09/96 | 11/96 |
| Solution Design | 10/96 | 11/96 |
| Implementation | 06/97 | 09/97 |
| Training | 06/97 | 09/97 |

3. CLAIMS ADJUDICATION

The Claims Adjudication module provides a repository of all data associated with claims received by NPFC and supports the timely and equitable adjudication of claims. It supports the cost recovery and litigation processes by ensuring accurate and comprehensive documentation are maintained. It tracks claims to final resolution and documents source designation and advertising. The current Lotus Notes system supports the document management and groupware requirements of the claims function, however, it is incapable of properly accounting for all financial data associated with the claims process. It cannot provide an interface of claims financial data with other NPFC financial systems such as DAFIS and NPFC's ORACLE Accounts Receivable, General Ledger and Project Accounting system applications. Claims payments and other financial data have to be manually entered into those systems now, increasing workload and the opportunity for error. It is imperative that this functionality be established in the claims module, as well as the ability to meet internal and external reporting, analysis and query requirements, CFO Account requirements, audit preparation and performance measurement requirements of the process.

The conversion of the Claims Adjudication module to an ORACLE database, integrated with the Case and Financial NEMIS modules is in the very early stages of development. A requirements analysis has been performed; however, the design and development of the system cannot continue unless additional funding is provided. The conversion and development of the claims module is NPFC's highest priority of the NEMIS modules and capabilities. The Claims module forms an important part of the business practices of

NPFC and the integration of this area into NEMIS is critical to the long-term success of the claims function and OSLTF funds management.

| **Claims Adjudication** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 01/97 | 03/97 |
| Solution Design | 09/97 | 12/97 |
| Build | 12/97 | 03/98 |
| Testing | 04/98 | 05/98 |
| Implementation/Data Conversion | 01/98 | 09/98 |
| Documentation | 02/98 | 09/98 |
| Training | 05/98 | 09/98 |

4. VESSEL CERTIFICATION

NPFC's Vessel Certification Division maintains a comprehensive interactive data base on nearly 20,000 certificates of financial responsibility. The division processes applications from vessel operators for COFRs, ensures vessels carry adequate insurance and issues COFRs to vessel operators. The COFR system module supports the data management and reporting aspect of these functions, and also supports Coast Guard field COFR enforcement efforts. Entries into the database are also uploaded to MSIS on a nightly basis in order to provide timely information for enforcement purposes.

The COFR Database is being transitioned from a CTOS Progress Database format, which will no longer be supported by the Coast Guard, to an ORACLE database. The conversion of the COFR database is near completion.

| **COFR** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 10/96 | 11/96 |
| Solution Design | 12/96 | 03/97 |
| Build | 08/97 | 10/97 |
| Testing | 11/97 | 12/97 |
| Implementation/Data Conversion | 12/97 | 03/98 |
| Documentation | 02/98 | 03/98 |
| Training | 02/98 | 03/98 |

5. RESOURCES MANAGEMENT

The Resources Management NEMIS module maintains data on personnel, equipment inventories, and supplies. It stores training plans and records, performance evaluation

data and OERs. It is necessary to ensure efficient human resources management and reporting.

The current Resources Management module resides in Lotus Notes. The conversion to the ORACLE database has not yet begun, and is not scheduled until after all the remaining modules and capabilities have been fully implemented. Projected timeframe for conversion is FY99.

| **Resources Management** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 10/98 | 12/98 |
| Solution Design | 12/98 | 01/99 |
| Build | 01/99 | 04/99 |
| Testing | 05/99 | 06/99 |
| Implementation/Data Conversion | 06/99 | 09/99 |
| Documentation | 06/99 | 09/99 |
| Training | 06/99 | 09/99 |

6. NPFC INTRANET/EXECUTIVE INFORMATION SYSTEM

A critical aspect of the NEMIS architecture is the development of an Executive Information System where all employees have access over an NPFC intranet to the organizational strategic business plan, internal SOPs, Coast Guard and NPFC instructions, executive information and reporting, policy and legal guidance, Interagency Agreements and MOUs, and other shared data. The EIS level will have roll-up features from other modules permitting management to measure and analyze statistics for internal and external reporting, IG audit preparation and workload reallocation and distribution. It will provide the tool by which NPFC's Strategic Business Plan can be linked to performance outcomes and progress toward GPRA goals can be measured and evaluated.

The design of the NEMIS EIS has not yet begun. The priority and focus of development have been on each of the individual modules and on the recent conversion to ORACLE applications. NPFC plans to begin the requirements analysis for the EIS in FY98.

| **Intranet/EIS** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 10/97 | 11/97 |
| Solution Design | 11/97 | 01/98 |
| Build | 01/98 | 05/98 |
| Testing | 06/98 | 09/98 |
| Implementation | 06/98 | 09/98 |
| Documentation | 06/98 | 09/98 |

| | | |
|---|---|---|
| Training | 06/98 | 09/98 |

7. WORKFLOW AND IMAGING

NPFC performs a variety of interrelated, multistage business practices that require cooperative efforts and significant workflow interactions between the different Divisions and external customers. Claims processing, Certificates of Financial Responsibility (COFRs) requests, cost recovery efforts, and financial management requirements all involve detailed processes that need to be monitored and tracked. Procurement of an automated workflow and imaging system will provide NPFC with a mechanism to streamline these processes and allow for a more efficient use of resources. In addition, in recent months, both the Secretary of Transportation and OMB have shown a renewed interest in agency compliance with the target reduction levels of the Paper Work Reduction Act. Seventy-five percent of Coast Guard work falling under the Paper Work Reduction Act results from reporting requirements generated by OPA. The Workflow and Imaging portion of NEMIS will substantially reduce the need to maintain duplicate paper records for case, claim, and COFR files by allowing documents to be stored electronically and will contribute to the Coast Guard's progress of meeting target reductions.

The design of the NEMIS Workflow and Imaging has not yet begun. NPFC has recently initiated discussion with various contractors and started reviewing COTS EIS software. To date, the priority and focus of development has been on each of the individual modules and on the recent conversion to ORACLE applications.

| **Workflow/Imaging** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 10/96 | 12/97 |
| Solution Design | 12/97 | 01/98 |
| Build | 01/99 | 06/98 |
| Testing | 06/98 | 06/98 |
| Implementation | 07/98 | 09/98 |
| Documentation | 01/98 | 09/98 |
| Training | 07/98 | 09/98 |

8. INTERNET/ELECTRONIC COMMERCE

Internet Support and Development will enhance NPFC's Home Page on the World Wide Web for electronic commerce capability with the marine insurance industry, and support of NPFC's claims adjudication, cost recovery, ceiling requests, and other business processes. Also, because of our need to rapidly communicate with the Department of Justice for litigation support; the Environmental Protection Agency, National Oceanic and Atmospheric Administration, and other agencies for case financial management; and thousands of private sector customers in all our business lines, we require extensive use of Internet and Website support. Internet access will permit NPFC's customers, regardless of their automation system capabilities, to access needed services and information from

NPFC. For example, it is important that a claimant, who has suffered some type of damage or loss of income from an oil spill incident, be able to submit claims electronically and to easily determine the status of his/her claim at any time. Providing this capability is fundamental to maintaining a positive public image of NPFC and the Coast Guard. A similar capability exists providing vessel operators with the status of COFR applications and allowing them to submit COFR applications electronically. Ceiling requests by Coast Guard and EPA OSCs will be automated, freeing the nine Coast Guard District offices of this function. Similar capabilities will be developed for NPFC's other customers.

NPFC currently has a Web-site on the WWW, which has been maintained by the NMC. With our migration to SWIII, NPFC will need to assume responsibility for maintaining its own web-site. The web-site is in need of redesign and enhancement as well as expansion to provide electronic commerce functionality.

| **Internet/Electronic Commerce** | **Start** | **Finish** |
|---|---|---|
| | | |
| Requirements Analysis | 10/97 | 12/97 |
| Solution Design | 12/97 | 01/98 |
| Build | 01/98 | 06/98 |
| Testing | 06/98 | 06/98 |
| Implementation | 07/98 | 09/98 |
| Documentation | 07/98 | 09/98 |
| Training | 07/98 | 09/98 |

**PROJECT STATUS:**

Each NEMIS module is in a different phase of development. The following table indicates the project status for each module:

| | |
|---|---|
| Case Management | System Deployment |
| Financial Management | System Deployment |
| Claims Adjudication | Research and Development |
| Vessel Certification | Prototyping/Limited Production |
| Resources Management | Research and Development |
| NPFC Intranet/Executive Information System | Research and Development |
| Workflow and Imaging | Research and Development |
| Internet/Electronic Commerce | Full Scale Production |

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.750 | $ .550 | $ .600 | $ .351 | $ .351 | $ .351 | $ .351 | $ .351 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 4.604

**PERFORMANCE AND SAVINGS:** The NEMIS system is designed to increase both performance and savings for the Coast Guard. The savings will result from improved business effectiveness that will reduce the need for NPFC staff expansion. In addition, by maximizing the use of COTS products, Oracle's Application Implementation Methodology, and state-of-the-market technology, savings will also be realized through reduced long term system maintenance costs. The following is a summary of the benefits of the NEMIS system:

- Improves accuracy of case, claims, COFR and financial data.
- Facilitates quicker and easier access to data for reporting, analysis, query and performance measurement.
- Eliminates labor inefficiencies inherent in the current system, such as:
  - time consuming manual multiple entry of the same data.
  - manual reconciliation of NPFC data which disagrees with DAFIS

- Improves tracking of the Emergency Fund balance which will:
  - ensure that information provided to Congress and Coast Guard management is accurate and up-to-date.
  - provide an accurate trigger for indicating a need to replenish the Emergency Fund through an emergency appropriation request.

- Improves tracking of expenditures which will:
  - allow timely transmission of data for case managers on-site at spills
  - provide more accurate information for decision support
  - strengthen accounting safeguards which minimize the chances of exceeding ceiling limits
  - alert case officers when new actions are required for closed cases.

- Improves tracking of payments from Responsible Parties which will assure the accuracy of charges for:
  - interest
  - administrative expenses
  - penalties.

- Increases efficiency and expediency in the cost recovery process, thereby increasing gross receipts to the U.S. Treasury.

- Increases efficiency in the claims process, which will reduce the claims backlog and expedite payment of claims.

- Establishes the data architecture for current and future development including:
  - integrity controls
  - utilities for easy data manipulation (create/read/update/delete).

- Improves archiving capability, providing:
  - improved backup and recovery of historical data
  - quicker access to current data.

**INITIATIVE ID:** USCGO064

**ORGANIZATION/ENTITY:** USCG/NAVCEN

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
Henry McManus, (703) 313-5842

**TITLE OF PROGRAM/PROJECT:** Navigation Systems Information Dissemination Network (NSIDN)

**TYPE:** PSS

**DESCRIPTION:** The USCG Navigation Center (NAVCEN) uses Information System resources (several networked microcomputers and two Control Station systems) to provide Navigation Information Services worldwide. The Networked microcomputers form the Navigation Systems Information Dissemination Network (NSIDN) and provides Navigation information via HTTP, FTP, SMTP, LISTSERVER, FAX-ON-DEMAND, and DBMS services. Information currently provided includes the Coast Guard Boating Safety Hotline as well as Radionavigation services that include LORAN and Radio Beacons, the Global Positioning System (GPS), Differential GPS (dGPS), Local Notice to Mariners (LNM), Marine Communication, Civil GPS Service Interface Committee (CGSIC) and Recreational Boating Safety information. The Command and Control segments for the Coast Guard dGPS service and the LORAN Consolidated Control Service (LCCS) are also operational at NAVCEN. Both dGPS and LCCS use microcomputers extensively for Control Station and Remote broadcast equipment communications and the analysis of collected system data to validate the services performed. These systems are supported and maintained outside the NAVCEN and only the personnel cost associated with providing information to the NSIDN is considered.

**OA/OST GOALS SUPPORTED:**

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential.
- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 5: Enhance and extend our reputation as world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particular in the areas of infrastructure, safety and security.
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and flexibility of choices.

**MILESTONES 1, 2, 3, & 4 AND DATES:**

1. Upgrade all microcomputers in the NSIDN to Microsoft Windows NT 4.0/MS OFFICE 97 - 10/97.

2. Streamline and move all information dissemination services to the Microsoft environment - 1/98.

3. Redesign and implement disaster recovery/enhanced security on the NSIDN - 3/98.

4. Re-evaluate and upgrade the NSIDN with state-of-the-art resources, as needed - 10/98.

**PROJECT STATUS:** All NAVCEN services are in System Maintenance. Upgrades, redesign and maintenance required.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .671 | $ .667 | $ .643 | $ .672 | $ .672 | $ .672 | $ .672 | $ .672 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 5.341

**PERFORMANCE AND SAVINGS:** The NSIDN at NAVCEN has grown over the years to provide different types of Navigation information to the user public via more and more vehicles with little growth in size. More information is being provided through more services by making better use of available technology. The savings are realized by automating tasks where possible and not requiring additional personnel to handle the growth in services provided to the user community.

**INITIATIVE ID:** USCGO065

**ORGANIZATION/ENTITY:** USCG/G-MOV

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
CAPT R. Ross, (202) 267-0731

**TITLE OF PROGRAM/PROJECT:** Ports and Waterways Safety System (PAWSS)

**TYPE:** PTC, PIM, PNL, PSV and PDA

**DESCRIPTION:** Vessel Traffic Service (VTS) is a configuration of sensors, communication links, personnel, and decision support tools that allow the Coast Guard to monitor ports and disseminate information. Through the PAWSS project, the Coast Guard has adopted a process to determine if a port should have a federal presence in a VTS to achieve a desired level of safety. This is a process in which extensive user-Coast Guard consultation determines the appropriate safety measures to be implemented. The first port identified through this process for a new VTS installation is New Orleans, LA. Additional ports may be identified through dialogue with local representatives for both new installations and retrofit in places that already have a Coast Guard VTS. PAWSS will modernize and expand VTS systems using state-of-the-market components, open architecture, and modular design techniques for ease of insertion of new technology and to accommodate planned future improvements such as the use of Automatic Identification Systems (AIS). The system shall have a standard core set of functions basic to each port, with add-on modules to meet unique port requirements. Schedule, cost effectiveness, and configuration management to maintain system cohesion and standards will be emphasized.

Existing VTS systems provide limited centralized control capability and can no longer effectively accommodate changing requirements without major modifications. The increased size of vessels being managed, increased levels of port congestions, and heightened public sensitivity to the threat of environmental pollution from hazardous materials necessitate an automated, centralized control system. The Port Needs Study articulated the direct benefits of such a VTS in terms of avoided vessel casualties and consequences such as loss of human life, cargo loss, spill clean up costs, environmental impact, property damage, etc. VTS will facilitate commerce by providing the affected ports with a safe, technologically advanced, and efficient system for managing commercial vessel traffic. It will promote environmental protection and safety at sea to reduce pollution, accidents and associated cost. PAWSS will lead the way toward the development of a national intermodal port management and waterway system. It will enhance and extend the Coast Guard's reputation as the world's premier maritime service and supports Coast Guard's leadership in a National Waterways Management role.

FY98 and FY99 funds will be used for system installation and testing; site surveys, acquisition and construction; audits, assessments and reviews of the system; hardware and software.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, 4 AND DATES:**

- Milestone 1 and Date: Key Decision Point 2/3 9/97

- Milestone 2 and Date: Contract Solicitation 1st QTR FY98

- Milestone 3 and Date: Contract Award 4/98

- Milestone 4 and Date: Key Decision Point 4 9/00

**PROJECT STATUS:** Full Scale Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 4.150 | $ 5.850 | $ 2.600 | $ 4.000 | $ 2.400 | $ 2.500 | $ 24.300 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 45.800

**PERFORMANCE AND SAVINGS:** Potential personnel and operations savings as system is deployed to existing VTSs. These savings may be offset by installation of system in ports without VTSs.

**INITIATIVE ID:** USCGO066

**ORGANIZATION/ENTITY:** USCG/G-WR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
David Swatloski, (202) 267-2096

**TITLE OF PROGRAM/PROJECT:** Personnel Data System (PDS)

**TYPE:** PIM

**DESCRIPTION:** PDS is a personnel system which tracks assignments, retirements, promotions, training management and service record management.

These platform applications will evolve to become PMIS/JUMPS II. Extensive planning with SIRMP and PMIS/JUMPS II are underway and at various stages of completion.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- 
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances.
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .750 | $ .750 | $ .750 | $ .750 | $ .750 | $ .500 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 4.250

**PERFORMANCE AND SAVINGS:** Savings and efficiencies we take as the system we installed. Generally the capabilities of PDS replaced existing capabilities and allow the Coast Guard to manage closer to the margins.

**INITIATIVE ID:** USCGO067

**ORGANIZATION/ENTITY:** USCG/G-WR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
David Swatloski, (202) 267-2096

**TITLE OF PROGRAM/PROJECT:** Personnel Management Information System/Joint Uniform Military Pay System (PMIS/JUMPS)

**TYPE:** PIM

**DESCRIPTION:** PMIS/JUMPS is the Coast Guard's military personnel and payroll system. It provides military pay for active, reserve, retirees, and annuitants. This system allows for the continued operation of the Coast Guard's Military Pay and Personnel Information System. PMIS/JUMPS II will replace this system.

**OA/OST GOALS SUPPORTED:**

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage
- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our

borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 4.200 | $ 4.200 | $ 4.200 | $ 2.900 | $ 2.900 | $ 0 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 18.400

**PERFORMANCE AND SAVINGS:** These cost represent time share costs transferred to DOT for use of main frame computing services. PMIS/JUMPS is being replaced to achieve additional savings and benefits. If this effort is not funded, payroll processing will cease, and all payroll support will return to a manual process.

**INITIATIVE ID:** USCGO068

**ORGANIZATION/ENTITY:** USCG/G-WR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
David Swatloski, (202) 267-2096

**TITLE OF PROGRAM/PROJECT:** Personnel Management Information System/Joint Uniform Military Pay System II (PMIS/JUMPS II)

**TYPE:** PIM

**DESCRIPTION:** PMIS/JUMPS II is the re-engineering of the Coast Guard's military personnel and payroll system. It will provide military pay for active, reserve, retirees, and annuitants. PMIS/JUMPS II will also serve as the data server for all personnel and training activities for the Coast Guard. This re-engineering effort began in 1992 using contractor support to perform requirements analysis and validation, analysis of alternatives, a life-cycle cost/benefit analysis, a detailed design and specifications, training Government employees in newer technology, and testing for implementation of the requirements.

This effort replaces the data capture part of the process of units administering their members assigned and eliminates Personnel Reporting Units.

**OA/OST GOALS SUPPORTED:**

- GOAL 1: Provide leadership and a working environment to enable all of our people to reach their full potential
- GOAL 2: Place diversity in the Coast Guard at center stage
- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performances
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Prototype SDAIII and Military Compensation 4/98

- Milestone 2: System Integration and Testing 10/98

- Milestone 3: Discontinue current system 12/00

- Milestone 4: Additional Functional modules complete 09/03

**PROJECT STATUS:** Prototyping/Limited Production

**PROJECT COST PER YEAR (in millions)**: Costs are procurement sensitive as the majority of this effort is contracted out. In FY98, if the efforts are underway, cost information will be provided.

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| TBD | TBD | TBD | TBD | TBD | TBD | TBD | TBD |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** TBD**.** Total discounted life cycle cost is $15,235K over a 15 year projected life cycle... discounted benefits over the same period are $89,214K. Over-all benefit/cost ratio is 5.85-to-1.

**PERFORMANCE AND SAVINGS:** It is projected that there will be 190 FTE savings reflected in the benefits stream mentioned above.

**INITIATIVE ID:** USCGO069

**ORGANIZATION/ENTITY:** USCG/G-SIR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE #):**
Kathleen Shea, (860) 441-2770

**TITLE OF PROGRAM/PROJECT:** Coast Guard Research & Development Center's Management Information System (RADMIS)

**TYPE:** PIM

**DESCRIPTION:** The U.S. Coast Guard, Research and Development Program has identified a lack of accurate, complete, and timely information for decision-making and program monitoring. Studies have been conducted by internal working groups and contractors to delineate the problems that exist in acquiring information about current and past projects.

The Coast Guard has determined that a Research and Development Program Management Information System (RADMIS) is required to allow project and program managers and support personnel to manage, access, and use project information under an efficient automated process. RADMIS will allow project managers and support personnel to use project information in a timely manner, with accurate, current data and allow improvements in the management of the projects.

RADMIS will consist of an data base with associated hardware and software for use by project managers and support personnel to manage, access and distribute information about Coast Guard Research and Development projects. The system has been partitioned into two methods of providing project information. One is based on an enterprise-wide project management system and the other is based on a document management system. Both systems are accessed and integrated with the Coast Guard SWIII using the Microsoft Windows NT operating system. Both systems are integrated with the Microsoft SQL Server Database and are primarily commercial (off-the-shelf) software.

The system provides for import and export of project plans through Microsoft Project and for documents through Exchange, Word and Excel and PowerPoint.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services.
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- ECONOMIC GROWTH AND TRADE: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation**.**

**MILESTONES 1, 2, 3 & 4 AND DATES:**

- Milestone 1: Feasibility Study - Requirements Analysis and System Specifications (Completed 9/95).

- Milestone 2: Review requirements and software packages, develop plan to build system. (Completed 4/96).

- Milestone 3: Acquire and install SWIII hardware and software and commercial software and integrate. (Completed 11/96).

- Milestone 4: Perform Training for Pilot Team members and input project Data (Completed 4/97).

- Milestone 5: Develop Document Management Information System and deploy to Pilot Team (Completed 8/97).

- Milestone 6: Develop reports of project management information (1/98).

- Milestone 7: Input all current and planned R&D Center Projects and Documentation (6/98).

**PROJECT STATUS:** Research and/or Development.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .225 | $ .175 | $ .175 | $ .175 | $ .175 | $ .175 | $ .175 | $ .175 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.450

**PERFORMANCE AND SAVINGS**:

**Cost Benefits**: Once deployed, RADMIS is expected to meet Coast Guard needs well into the 21st Century. During the system's life-cycle certain tangible and intangible benefits can be realized as the system evolves.

Tangible:

Annual Cost Avoidance's Identified: $255,829 (Note 1)

Note 1: a reasonable estimate was made based on a 13% savings in the 25% of the staff time that is associated with functions that RADMIS will automate or reduce data entry or retrieval time. That same 13% reduction was used for travel and paper related costs that will be equally affected by RADMIS and these savings were added to the staff savings.

Intangible:

Increase management efficiencies by:

- Faster data input: set up to minimize the amount of text, supplemental explanations, typing or other work.

- Reduced costs for information retrieval: All RADMIS users would have access to the most current information. It would be on-line at all times.

- Faster generation of ad hoc reports: results in reduction of time spent answering data calls

- Less paper: The costs associated with the production, reproduction, handling, distribution, and storage of paper based information resources could be reduced

- Less travel: Better exchange of information between the R&D Center and CGHQ could cut down on travel requirements

**INITIATIVE ID:** USCGO070

**ORGANIZATION/ENTITY:** USCG/G-OCC

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE #):**
LCDR Steven H. White, (202) 267-1054

**TITLE OF PROGRAM/PROJECT:** Search And Rescue Management Information System (SARMIS) redesign

**TYPE:**PIM, PDA, AIM, ASS

**DESCRIPTION:** SARMIS is an existing administrative reporting information system. It is a mission essential application that enables the collection of search and rescue incident data, data storage, and the retrieval of information pertaining to Coast Guard responses, assistance and rescue services provided to the general public. SARMIS captures data from more than 475 reporting Coast Guard sources.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage."

**MILESTONES 1, 2, 3 & 4 AND DATES:**

- Preliminary Design 8/97
- Critical Design 9/97
- Full Development/Testing 10/97
- System Integration/Testing 11/97
- System Acceptance 1/98

**PROJECT STATUS:**

- SARMIS I: System Maintenance
- SARMIS II: Research and/or Development

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .601 | $ .621 | $ .151 | $ .150 | $ .150 | $ .150 | $ .150 | $ .150 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 2.123

**PERFORMANCE AND SAVINGS:** SARMIS is currently undergoing a complete system renovation/redesign (i.e., system software and hardware architectures). This initiative will deliver significant technology improvements. The new SARMIS will facilitate rapid data capture, increased data accuracy and utility in SAR case and workload information. SAR data and automated measures (SAR Program efficiency and effectiveness) will drive smarter/cost economical business and resource decisions pertaining to: human resource workload management, facility and platform positioning, resource optimization, mishap prevention, excellence in SAR mission support and rescue service delivery to the public. In terms of real costs savings (recovered in FTE), the tangible benefit envelope for SARMIS II include $100K in annual cost savings for operations and maintenance beginning FY-99.

The specific information technologies and system reengineering approaches that are applicable in this initiative include: **(1)** Software system redesign to Coast Guard standard ORACLE 7, Relational Database Management Software; **(2)** distributed architecture consolidation to one centralized national database; **(3)** central site hardware system upgrade to Coast Guard standard Hewlett Packard minicomputer platforms; **(4)** SARMIS end-user software conversion for operability on Coast Guard Standard desktop computing platforms (SWIII) and data entry via intranet (web-entry); **(5)** geographic relocation of the complete SARMIS system and production process from the DOT/TCC's AMDAHL computer system (operated out of Washington, DC) to the Coast Guard Operations Systems Center in Martinsburg, WV. All plans, approaches and project development actions are consistent with Commandant Instructions (COMDTINST) 5230.41, 5230.45 and 5230.49.

**INITIATIVE ID:** USCGO071

**ORGANIZATION/ENTITY:** USCG/G-OCC & G-SCT

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Eugene Vogt, (202) 267-1348

**TITLE OF PROGRAM/PROJECT:** Commercial Satellite Communications (SATCOM)

**TYPE:** PII

**DESCRIPTION:** The Commercial SATCOM initiative provides funding for Coast Guard mobile units use of Commercial Satellite communications. It also supports maintenance, and upgrades to the commercial satellite terminals installed on Coast Guard mobile assets. A major initiative to upgrade our existing Commercial SATCOM capabilities beginning in FY99 is included in this project. The project also funds a few shore based terminals in support of the Global Maritime Distress and Safety System (GMDSS). SATCOM provides command, control and communication (C3) of Coast Guard cutters and contingency forces as well as interoperability with commercial vessels equipped with satellite communications in accordance with GMDSS amendments to the Safety of Life at Sea (SOLAS) convention. SATCOM supports all Coast Guard missions.

Commercial SATCOM supports improved business practices by providing highly reliable, wide-area voice and data communications. Future SATCOM initiatives are planned to provide a secure capability to this communication path and offset the rising cost of the current communications infrastructure, High Frequency (HF) Radio and International Maritime Satellite (INMARSAT) user costs through capital investment in new state-of-the-art technology. Expansion of the commercial SATCOM path to aircraft will improve existing air to ground communications and allow closure of the Air to Ground positions at Communications Stations. SATCOM users can currently direct dial to any telephone on the public switched network using today's existing INMARSAT capabilities. The upgrade initiative will replace High Frequency Data Link (HFDL) which provides the 110' cutter fleet with record message traffic and will facilitate closure of the HFDL positions at Communication Stations. SATCOM will directly benefit the Law Enforcement, Search and Rescue, Intelligence, and Logistics programs by providing a rapid and reliable communications path at a reasonable cost. Installation of satellite communications will afford the Coast Guard the first step towards possible retirement of significant HF based infrastructure and substantial resource savings in FTE and support costs.

The existing High Frequency (HF) radio communications infrastructure is a poor communications path to support large bandwidth data exchanges due to limited throughput. Use of new technology will allow the Coast Guard to take advantage of the cost savings resulting from competition in the commercial SATCOM market. Competition among the satellite service providers will drive the cost of service from the

current $5.90/minute to $1.50/min or less. This will allow the mobile platforms to utilize the commercial satellite communications path to its fullest potential at less cost per platform. Data communications, to accommodate tactical C2 and support needs, is identified as a critical gap in the Coast Guard communications infrastructure as listed in the U.S. Coast Guard Command, Control, Communications, Computer and Intelligence (C4I) Baseline Architecture (COMDTINST 3090.6). This current gap will become a larger problem in future Coast Guard operations due to an increasing need for information exchange from or to mobile units, and the inability of HF to support large digital data transmission rates due to insufficient bandwidth.

Law Enforcement: The Law Enforcement program is currently the largest user of INMARSAT. At least five of the critical gaps, related to Law Enforcement communications capabilities identified in COMDTINST 3090.6, paragraph 9.5.1.1., can be bridged by installation of commercial SATCOM equipment on cutters and aircraft. These critical gaps include:

- The lack of reliable connectivity between cutters, aircraft and operational shore facilities, especially at extended ranges.

- The lack of an effective interface for exchanging information between larger Coast Guard platforms that support the Enforcement of Laws and Treaties (ELT) mission and Shore facilities (Districts) and smaller platforms (WPBs).

- The limited ability to effectively exchange sensor, intelligence and other tactical information between aircraft, mobile units and shore facilities.

- The lack of high speed, reliable communications between mobile assets and operational support information to assist in or which is mission essential for the execution of the ELT/Maritime Law Enforcement (MLE) mission.

- The generally cumbersome interfaces available for using Coast Guard Command and Control/Communications systems.

Search and Rescue: COMDTINST 3090.6, paragraph 4.5.1.1, identifies critical gaps in communications capability related to Search and Rescue (SAR) which a commercial SATCOM capability would be logical and cost effective solution. Specific communications requirements which could be addressed by commercial SATCOM, as listed in COMDTINST 3090.6 are:

- OPCEN controllers shall have secure or non-secure voice communications with On Scene Commanders.

- Conduct On Scene Commander (OSC) functions, including coordination of Surface Resource Unit (SRU) response, monitoring of SRU performance, adoption of SAR Action Plan to on scene conditions and incident development, and communicating with

the SAR Mission Coordinator in real time.

- Communicate in real or near time, in all modes (Voice, data, video), with Coast Guard resources and all appropriate federal, state and local agencies and maritime public while conducting operations.

- Automated tactical information network which is compatible between ships, shore facilities and aircraft (downlink from aircraft to ship/shore).

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and expand our reputation as the world's premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Complete installation of Inmarsat A terminals on 210' and larger cutters - Completed 8/96

- Milestone 2: Complete installation of INMARSAT C terminals on 110' cutters - Completed 7/97

- Milestone 3: Complete installation of INMARSAT C terminals on 210' and larger cutters - Projected 9/97

- Milestone 4: Evaluate commercial offerings in preparation for upgrades scheduled for FY99 - Projected 8/98

- Milestone 5: Begin installation of upgraded commercial SATCOM for 105 cutters - Projected FY99

**PROJECT STATUS:** System Deployment and Research and/or Development. Installation of INMARSAT C terminals to enable basic satellite communications is complete and is undergoing evaluations. Installation of similar terminals aboard 210', 270', and 378' cutters is continuing. INMARSAT A is installed aboard 210', 270' and 378' cutters and is being evaluated for cost and service provided. Planning documents have been submitted to provide a major upgrade to this communications infrastructure and are reflected in the below figures. The upgrade is scheduled to begin in FY99 and will replace current INMARSAT A commercial SATCOM terminals on 44 Cutters with the INMARSAT B solution which supports mandatory maritime distress and safety related interfaces (i.e. GMDSS) as well as data capability to meet Command and Control requirements. INMARSAT is currently the only GMDSS service provider. In addition the upgrade will add new commercial satellite SATCOM capability for 105 cutters and 192 aircraft.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.212 | $ 1.247 | $ 5.773 | $ 6.590 | $ 7.128 | $ 6.640 | $ 3.667 | $ 1.425 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 33.682

**PERFORMANCE AND SAVINGS:** This initiative improves vital communications infrastructure and systems to maintain or improve services mandated by law and treaty. Using COTS hardware and providing international standard service will minimize costs now and in the future. Under the Government Performance and Results Act, SATCOM VHF-FM relates primarily to "output performance." The SATCOM project ensures the Coast Guard makes maximum use of the lowest cost maritime satellite telecommunications currently available and standardizes infrastructure to meet the demands of emerging applications such as LEIS II. The project provides for continuously available underway communications for Coast Guard long range Command & Control including voice and data channels to cutters underway.

The project also provides communications needed to meet international treaty obligations under the Safety Of Life At Sea (SOLAS) Global Maritime Distress And Safety System. This communications link information is vital to the safe interoperability with international maritime vessels.

**Cost Benefits**

Tangible:

The Coast Guard achieves the lowest price currently available global maritime communications system while meeting treaty requirements. The capital investment requested in an FY99 budget request represents significant long-term cost avoidance in SATCOM operating costs over the present INMARSAT A system. It will also provide more reliable voice communications for command and control assets and a real time response turnaround. Future mission essential applications will be able to take advantage of the additional capabilities offered by commercial SATCOM communications services. Replacement of HFDL, which will exceed its projected life cycle soon, with a commercial satellite communications solution will enable the fleet to receive record message traffic more efficiently and facilitate closure of the HFDL positions at Communications Stations. Implementation of the upgrade solution will be a first step towards possible retirement of significant HF based infrastructure and substantial resource savings in personnel (37 FTE) and support costs.

Intangible:

Increase reliability, performance, and multi-mission capability by:

- multiple communications paths to cutters underway.
- high reliability, high availability, global communications.
- flexible use including voice and data channels.
- security using compatible STU-III equipment.
- interoperable with international maritime vessels.
- modern, standards based electronics.
- consistent infrastructure and operational control.
- reduced risk by elimination of critical nodes, flexible control.
- flexible control of operational platforms.

**INITIATIVE ID:** USCGO072

**ORGANIZATION/ENTITY:** USCG/G-WR

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
David Swatloski, (202) 267-2096

**TITLE OF PROGRAM/PROJECT:** Ship Control and Navigation Training System (SCANTS)

**TYPE:** PSS

**DESCRIPTION:** The ship's Navigation training and Simulator is used to simulate different shipboard environments from a navigational standpoint.

The simulator produces a controlled environment for the development of ship-handling skills. This environment would be difficult to re-create with any consistency in the real world. Additionally, the environment allows for optimal training conditions for personnel using the system. This increases the efficiency of training efforts.

The system's two primary customers are newly commissioned ensigns and prospective Commanding Officers assigned to afloat units. These two groups of bridge personnel are critical to the safe manning and navigation of Coast Guard vessels.

This initiative also reduces the cost of training options in real environments in two ways. First, it eliminates the cost of errors on operational assets and second, it significantly reduces the operating costs of using cutters for training.

**OA/OST GOALS SUPPORTED:**

- GOAL 3: Meet the mandate to streamline with no reduction in essential services
- GOAL 4: Maintain a strong response capability; always ready as a military service to meet multi-mission requirements
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .150 | $ .150 | $ .150 | $ .150 | $ .150 | $ .150 | $ .150 | $ .150 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 1.200

**PERFORMANCE AND SAVINGS:** Without additional funding, we will be unable to maintain the hardware. Ultimately, it will fail resulting in unqualified or less qualified crews on cutters. At the very least, we will pay for more expensive training methods.

**INITIATIVE ID:** USCGO073

**ORGANIZATION/ENTITY:** USCG/Command & Control Engineering Center ($C^2$CEN)

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Daniel Ronan, (757) 686-2140

**TITLE OF PROGRAM/PROJECT:** Shipboard Command and Control System - 270 (SCCS-270)

**TYPE:** PNL

**DESCRIPTION:** $C^2$CEN supports two separate $C^2$ systems on the WMEC-270s: COMDAC which serves as an organic integrated bridge system combining vectorized charts with integrated radar navigation, collision avoidance, automated visual navigation, electronic navigation, and piloting assistance; & NTCS-A which provides the over the horizon tactical picture for CIC and joint operations. The COMDAC system is based on late 1970s proprietary technology and is becoming more difficult and costly to support. A feasibility study in 1993 identified that a complete new system could be designed, procured and installed on all 13 WMEC-270s to replace COMDAC by simply reprogramming existing annual COMDAC support money. In addition, the new system would combine the local organic navigation system with the over the horizon tactical picture resulting in one powerful system that increases functionality and efficiency on the bridge and in CIC while substantially reducing annual maintenance and support costs. As part of a multiyear budgetary strategy, $C^2$CEN proposed replacing COMDAC with modern tactical computers based on the Navy's JMCIS architecture. On 24 March 1994, G-CCS approved the project and work began on replacing COMDAC and integrating the organic and over the horizon command and control systems. In the Summer of 1996, the US Navy's Navigation Sensor System Interface project team abandoned a costly navigation display system project and signed a memorandum of agreement with $C^2$CEN to jointly develop the SCCS-270 navigation software and to expand its use for all USCG WMEC/WHEC class cutters and all NAVSSI designated platforms. The US Navy's New Fast Attack Submarine Program joined the development team in 1997 and intends to use the SCCS-270 navigation software on the submarines scheduled to launch in 2003.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability: always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and extend our reputation as the world's premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Feasibility Study completed and approved 3/94.

- Milestone 2: Rapid application development, hardware design & procurement, and prototyping: completed proof of concept (10/95), first prototype (4/96).

- Milestone 3: First full pre-production system installation scheduled for 11/97.

- Milestone 4: ShipAlt Approval expected 3/98. Thirteenth and Final installation scheduled for 12/99.

**PROJECT STATUS:** Prototyping/Limited Production

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ .1.873 | $ .1.873 | $ 1.148 | $ 1.148 | $ 1.148 | $ 1.148 | $ 1.148 | $ 1.148 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 10.634

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, SCCS-270 relates to "output performance versus outcome performance". SCCS-270 enables the Coast Guard's thirteen 270' Medium Endurance Cutters to perform the functions associated with the Strategic Goals of the draft FY99 CG Performance Plan. These goals include safety, protection of natural resources, mobility, maritime security, and national defense.

Cost Benefits: SCCS-270 will save approximately $1.75M in annual support costs and delete 17 billets from COMDAC Support Facility's/$C^2$CEN's 1993 staffing level. The multi-budget year strategy cost savings will come from removing the aging COMDAC system from the WMEC-270s and replacing it with a state of the art, COTS-based, integrated navigation and command & control system: SCCS-270.

**INITIATIVE ID:** USCGO074

**ORGANIZATION/ENTITY:** USCG, Command & Control Engineering Center ($C^2$CEN)

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Daniel Ronan, (757) 686-2140

**TITLE OF PROGRAM/PROJECT:** Shipboard Command and Control System - 378 (SCCS-378)

**TYPE:** PNL

**DESCRIPTION:** The combat and tactical information system on 378' WHECs was an outdated collection of equipment which had problems associated with its age and limited automated functionality. The hardware was antiquated, processing command and control activities was people intensive, and there was no automated information integration. SCCS-378 upgraded the combat and tactical information equipment on all 378' WHECs using state of the art COTS- based information technology and available DOD provided software. Additional Coast Guard unique software segments were developed to provide complete automated functionality. With the completion of all installations, the program has entered the life cycle support stage and centers on fixing system trouble reports, implementing new enhancements via system improvement reports, and training crews on system operation, administration, and maintenance.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability: always ready as a military service to meet multi-mission requirements.
- GOAL 5: Enhance and extend our reputation as the world's premier maritime service.
- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security
- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- NATIONAL SECURITY: Advance the nation’s vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Feasibility Study completed and approved 7/93.
- Milestone 2: Completed all SCCS-378 Installations and LINK-11 retrofits 10/96.
- Milestone 3: Installed prototype "Second Retrofit Package" 3/97. Twelfth and final Second Retrofit Package scheduled for 8/98.
- Milestone 4: Ready for Training date scheduled 10/97.

**PROJECT STATUS:** System Maintenance

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 1.473 | $ 1.773 | $ 1.773 | $ 1.773 | $ 1.773 | $ 1.773 | $ 1.773 | $ 1.773 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 13.884

**PERFORMANCE AND SAVINGS:** Under the Government Performance and Results Act, SCCS-378 relates to "output performance versus outcome performance". SCCS-378 enables the Coast Guard's twelve 378' High Endurance Cutters to perform the functions associated with the Strategic Goals of the draft FY99 Coast Guard Performance Plan. These goals include safety, protection of natural resources, mobility, maritime security, and national defense.

Cost Benefits: SCCS-378 provides no tangible cost benefits. The addition of SCCS-378 on the WHECs, however, enables them to fully participate in joint DOD operations and more effectively control large multi-unit operations anywhere in the world. SCCS-378 was an integral factor in the Coast Guard's ability to: effectively manage the mass Haitian & Cuban exodus of 1994, lead a combined Navy/Coast Guard task force operating in the Persian Gulf, and participate as an "even player" in Baltic Ops 96.

**INITIATIVE ID:** USCGO075

**ORGANIZATION/ENTITY:** USCG/G-SCT; TISCOM

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LT Charles Pugh, (202) 267-1252

**TITLE OF PROGRAM/PROJECT:** Switched Voice Replacement Project (SVRP)

**TYPE:** PII

**DESCRIPTION:** SVRP is a project that makes strategic investments in the Coast Guard's telecommunications infrastructure for voice/data switched equipment. The switched voice replacement initiative will establish a centrally funded and managed acquisition process for replacing the obsolete, uncapitalized base of Private Branch Exchanges (PBXs) Coast Guard-wide.

The SVRP initiative will replace obsolete, insupportable Private Branch Exchanges (PBXs). PBX systems are essential components of the Coast Guard's telecommunications infrastructure and support ALL mission areas and business processes. PBXs provide cost-effective voice communications capability to CG units and connections to the Public Switched Telephone Network, including FTS2000.

Strategic investments in the Coast Guard's telecommunications infrastructure for state-of-the-art digital voice/data switching equipment will result in a forward migration to new network technologies such as ISDN and ATM. SVRP will support improved business practices such as management of FTS calling costs. Voice communication is essential to day-to-day Coast Guard operations, all mission areas and business processes.

**OA/OST GOALS SUPPORTED:**

- GOAL 4: Maintain a strong response capability: always ready as a military service to meet multi-mission requirements.

- GOAL 5: Enhance and extend our reputation as the world's premier maritime service.

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

- GOAL 7: Ensure that the Coast Guard epitomizes the best in quality management practices and performance.

- GOAL 8: Pursue and exploit new technologies to achieve gains in productivity and enhance mission performance.

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- MOBILITY: Shape America's future by ensuring a transportation system that is accessible, seamless, efficient, and offers flexibility of choices.

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:**

- Milestone 1: Identify a centralized Coast Guard position to manage acquisition of these PBXs. Consolidate requirements from all Coast Guard sites and develop priorities for replacements. Completed 7/97.

- Milestone 2: Begin installations using the standard procurement vehicles available. In progress FY97-02.

- Milestone 3: Identify a standard procurement vehicle to purchase medium and small PBXs. Projected 9/98.

- Milestone 4: Complete migration of all Coast Guard sites to the digital standard. Projected 9/02.

**PROJECT STATUS:** System Deployment. Replaced 20 PBXs in FY97; several were large including installations at San Pedro, Alameda, District 9, and Base Seattle. Installations represent approximately 10% of the installed base.

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 2.000 | $ 2.200 | $ 2.244 | $ 2.288 | $ 2.333 | $ 2.380 | $ 0 | $ 0 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 13.445

**PERFORMANCE AND SAVINGS:** Strategic investments in the Coast Guard's telecommunications infrastructure for state-of-the-art digital voice/data switching equipment will result in a forward migration to new network technologies such as ISDN and ATM. SVRP will support improved business practices such as management of FTS calling costs. Finally, the Coast Guard is currently partnering with the General services

Administration (GSA) to streamline the acquisition process which should reduce administrative time and costs.

**INITIATIVE ID:** USCGO076

**ORGANIZATION/ENTITY:** USCG/G-OPL

**ORGANIZATIONAL POINT OF CONTACT (NAME AND PHONE#):**
LCDR Hank Leeper, (202) 267-0435

**TITLE OF PROGRAM/PROJECT:** WHEC/WMEC Shipboard Sensors

**TYPE:** PCS, PDA

**DESCRIPTION:** At present, high endurance cutters (WHECs) and medium endurance cutters (WMECs) are not adequately equipped to detect, classify, sort or identify potential targets of interest (TOI) from stand-off ranges, especially in low- or no-light conditions. The most critical mission level sensor gaps as presented in section 9.5.1.2 of the $C^4I$ Baseline Architecture, include the following:

- The limited ability to detect suspect vessels offshore, particularly in high threat areas related to transit routes and approaches to ports.
- The general lack of stand-off surveillance capabilities from mobile assets, including the ability to sort and classify TOIs at extended ranges, and/or over the horizon.
- The lack of capability to detect small or low profile platforms such as small wooden or fiberglass vessels particularly at night.

Absence of these capabilities forces our ships to spend a substantial part of each cutter day maneuvering to classify an/or identify each vessel encountered in order to determine the contact's status as a TOI. The time and fuel wasted during such inefficient maneuvering could better be used in targeting priority TOIs to board at sea. G-OCC has acknowledged the criticality of this capability shortfall by placing this issue in their Phase I, High Urgency timeline of C4I needed improvements. **The new Surface Search Radar (SPS-73) will not provide the mission specific capabilities noted above.**

This project includes installation of an Inverse Synthetic Aperture Radar (ISAR) and stabilized mast mounted infrared (IR)/Electro-Optical (EO) sensor on 12 Coast Guard Cutters over the four year life of the project.

**OA/OST GOALS SUPPORTED:**

- GOAL 6: Engage the Coast Guard as an intermodal partner in the implementation of the DOT Strategic Plan, particularly in the areas of infrastructure, safety and security

**DOT GOALS SUPPORTED:**

- SAFETY: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

- HUMAN AND NATURAL ENVIRONMENT: Protect and enhance communities and the natural environment affected by transportation**.**

- NATIONAL SECURITY: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, that our borders are safe from illegal intrusion, and by promoting worldwide economic growth and stability

**MILESTONES 1, 2, 3, & 4 AND DATES:** N/A

**PROJECT STATUS:** Mission Need Justification

**PROJECT COST PER YEAR (in millions):**

| FY-97 | FY-98 | FY-99 | FY-00 | FY-01 | FY-02 | FY-03 | FY-04 & Beyond |
|---|---|---|---|---|---|---|---|
| $ 0 | $ 0 | $ 7.517 | $ 12.617 | $ 13.217 | $ 8.517 | $ 1.200 | $ 1.200 |

**INITIATIVE TOTAL LIFE CYCLE COST (in millions):** $ 44.268

**PERFORMANCE AND SAVINGS:** This project is a fundamental part of the Commandant's 5-year counterdrug budget submitted 14 March, 1997 in support of the Coast Guard's GPRA goals. The Coast Guard's GPRA goal for drug law enforcement, as reported to Congress, is to reduce drug smuggler effectiveness by 25 percentage points by 2002. Using the results of the Coast Guard's Deep Water Mission Analysis (DWMA), G-OPL has estimated that 84,600 resource hours are needed in order to reach that goal. The capabilities increase anticipated by this project is part of an integrated plan to close that resource hour gap. The approach is to provide additional capability to existing platforms, leveraging their effectiveness as a cost effective alternative to acquiring additional major cutters. Successful conclusion of this project will provide nearly 10% of the 84,600 resource hours needed.

The Mission Effectiveness Modeling and Analysis, conducted in 1995 for the DWMA, concluded an enhanced surveillance capability would result in a significant increase in detection, classification, and identification of TOIs. Although the DWMA model only used the performance characteristics of the ISAR (no IR), the classification capability improved an average of 45% over existing cutter capabilities, resulting in an overall increase in cutter effectiveness of 20%.

## 5. PROPOSED ENVIRONMENT.

### Data Management

The Coast Guard is in the process of developing a data architecture for the enterprise. The first phase of this architecture included the standardization of data across applications. In addition, the Coast Guard developed a draft information architecture for the enterprise in May, 1996. Part of this information architecture plan is an applications architecture depicting the applications under one program or functional area sharing common subject-area databases. In its new development efforts Coast Guard is already moving towards this architecture, which in effect will separate data from the applications that use it. Data Management is being recognized as vital to making IT investments that are less costly yet more beneficial to the enterprise.

### Telecommunications

Enhancements to the present telecommunications system will emphasize economy, interoperability, security, automation, ease of maintenance, and improvement of high volume message handling and throughput. Our plans by type of system are to:

Voice Capabilities

- Upgrade the National VHF-FM Distress and Safety System to meet all Coast Guard multi-mission command and control requirements and extend coverage to eliminate gaps. Capabilities will include: protecting sensitive information, processing digital selective calls (DSC) for the Global Maritime Distress and Safety System (GMDSS), and providing directional bearings (finding) to assist in search and rescue.
- Consolidate long-range radio communications management at the two Communications Area Master Stations (CAMS) and Communications Station Kodiak. Complete the COMMSYS 2000 project, integrating new technology and procedures to optimize COMMSYS efficiency.
- Replace obsolete, insupportable PBXs and telephone key systems with commercial-off-the-shelf, standards based systems that are Y2K compliant and have a migration path to ISDN and ATM. Implement caller ID to identify and respond to distress calls.
- Comply with JCS mandate for UHF MILSATCOM Demand Assignment Multiple Access (DAMA) signaling. Register validated Coast Guard unique, national security requirements for secure voice and tactical data and imagery capabilities in the Integrated Communications Database (ICDB). Install 5Khz UHF DAMA MILSATCOM aboard all WMEC 210’ cutters and prototype a similar installation on the WPB 110’ cutters.
- Expand the use of cellular phone and commercial and military satellite technologies on mobile platforms to achieve operational effectiveness and reduce the Coast Guard’s mobile radio infrastructure. Introduce alternatives to the expensive INMARSAT-A

system. Operating and support program managers have established new processes and systems which require access to the new generation of high-bandwidth satellite communications systems and terminal equipment for most mobile units.

Data Capabilities

- Fully implement the Global Maritime Distress and Safety System (GMDSS) requirements by 1999.
- Reduce dependence on High Frequency (HF) radio systems which lack bandwidth and error rate performance for data applications.
- Expand the bandwidth and performance of the Coast Guard Data Network (CGDN/CGDN+) using commercial standard equipment. Adopt efficient data communication protocols for mobile applications.
- Expand CGDN/CGDN+ gateways for Internet and electronic commerce applications. Institute firewalls to safeguard the integrity of internal Coast Guard data systems.
- Expand the use of cellular phone and commercial and military satellite technologies on shore units and mobile platforms. Operating and support program managers have increasing demands for bandwidth.
- Use automation tools to facilitate planning, electromagnetic spectrum use, and the management of transmission systems both afloat and ashore. Field state-of-the-art human/machine interfaces on cutters to minimize operator interaction, intervention, and monitoring of telecommunications circuits.

Message Capabilities

- Consolidate long-range radio communications management at the two Communications Area Master Stations (CAMS).
- Transition to the Defense Message System (DMS).

Video Capabilities

- Expand video teleconferencing to more major units to improve tactical communications and reduce travel expenses.

## Information Dissemination

Government Information Locator Service (GILS)

As Coast Guard sets up its server and expands Internet capabilities, it will identify the best technological means to make information easily accessible, i.e. installation of robust technology with metaheaders.

Freedom of Information Act (FOIA)

An increase in staff to effectively manage the FOIA program is being sought. G-SII submitted an FY-98 Opstage budget request which included a request for funding for additional personnel for IT management purposes. Also, it's anticipated that a consequence of the EFOIA (Electronic FOIA) will be the need for enhanced access to document scanners. We are actively working to provide these scanners to ensure we are able to meet business demands. Moreover, in consideration of the increased FOIA workload in the face of recent personnel streamlining, we are working to establish a Headquarters-wide FOIA tracking and on-line editing system.

A G-CCS (Chief of Staff) sponsored FOIA Quality Action Team (QAT) submitted its Final Report in March. Consequently, a G-CCS sponsored FOIA Natural Working Group (NWG) has drafted a FOIA Headquarters directive which will be promulgated in the very near future. The NWG will also explore technology and methodology to enhance FOIA implementation through IT solutions. These solutions will include complete on-line access to "reading room" documents via an Electronic Reading Room, as well as placing frequently-requested records on-line. G-SII has made steady headway in this area, and is reviewing several document tracking/editing software solutions. The most promising software package is one developed and in use by the Immigration and Naturalization Service. The requirement for newly-created records to be available by electronic means is being processed by the Records Manager.

In FY-98, the FOIA Office will increase its outreach in educational programs to cover more personnel at Headquarters, as well as key field units.

Coast Guard Directives System CD-ROM

In the future, we will eliminate most of the weaknesses by leveraging new technologies (i.e., increase use of SWIII), and by increasing staff and/or contractor support. We will further increase the strengths of this program through use of the Internet and Intranet (CGWeb). We will also increase our production frequency and in the area of distribution. We will provide further support to the public sector through the use of the Government Printing Office as a stocking point for our CDs.

Coast Guard Printing

With new legislation on the horizon, it appears that agencies will be given more freedom in choosing a printing contractor, enhancing our products. With the Transportation Administrative Services Center (TASC) moving towards a print-on-demand the Coast Guard will benefit in saving storage costs.

## Information Data Collection/Retention

Privacy

The Privacy Act of 1974 sets guidelines for proper collection and dissemination of information about individuals. The Coast Guard will continue to ensure the intent of the Privacy Act is met by educating members through formal training on the Privacy Act.

Records Management

The Coast Guard will continue to work to ensure that it has a Common Operating Environment (COE) and take measures to test certified software applications upon completion of DOD's testing to meet National Archives and Records Administration (NARA) requirements. Coast Guard officials will evaluate approved products for agency use to determine which ones will best meet agency needs and fulfill NARA's mandates for record profile mapping, access controls, system audits, integrity, disposition instructions and protection.

Public Use Reports

The Coast Guard Program Manager (G-SII) will continue to update existing policy and monitor ICB reports.

Forms Program

Coast Guard's goal is to automate all forms. To this end, each year, it is estimated that an additional 100 forms will be converted until the project is complete. In the end, all frequently used forms by Coast Guard staff members will be accessible via electronic media, including the Intranet. This will eliminate the need for paper forms, and will move Coast Guard closer to the "Paperless Office" environment.

## IT Training/Policy Development and Deployment/System Evaluation

### IT Training

IT training continues to focus on the Coast Guard Standard Workstation and includes introductory training to the Windows environment coupled with just-in-time training for the Office Automation (OA) suite of applications. The emphasis is on providing computer based training that enables training on the desktop for office automation as well as function based curricula. Training will exploit the use of the CGWeb (Coast Guard Intranet) as it matures. The commitment to improved business management of information technology, using Functional Process Improvement (FPI), remains strong and will continue to be implemented. Training needs that cannot be met through IT will be conducted in house wherever practical and outsourced to other government agencies or non-government providers as needed.

### Policy Development and Deployment

The Chief Information Officer established a working group of senior IT managers in each of the Coast Guard's business areas. This cross-programmatic group has completed the first draft of a comprehensive IT Strategic Plan for the Coast Guard. This plan will provide the overall guidance and vision for all supporting Coast Guard IT Policy. Other policy development and deployment will continue as necessary.

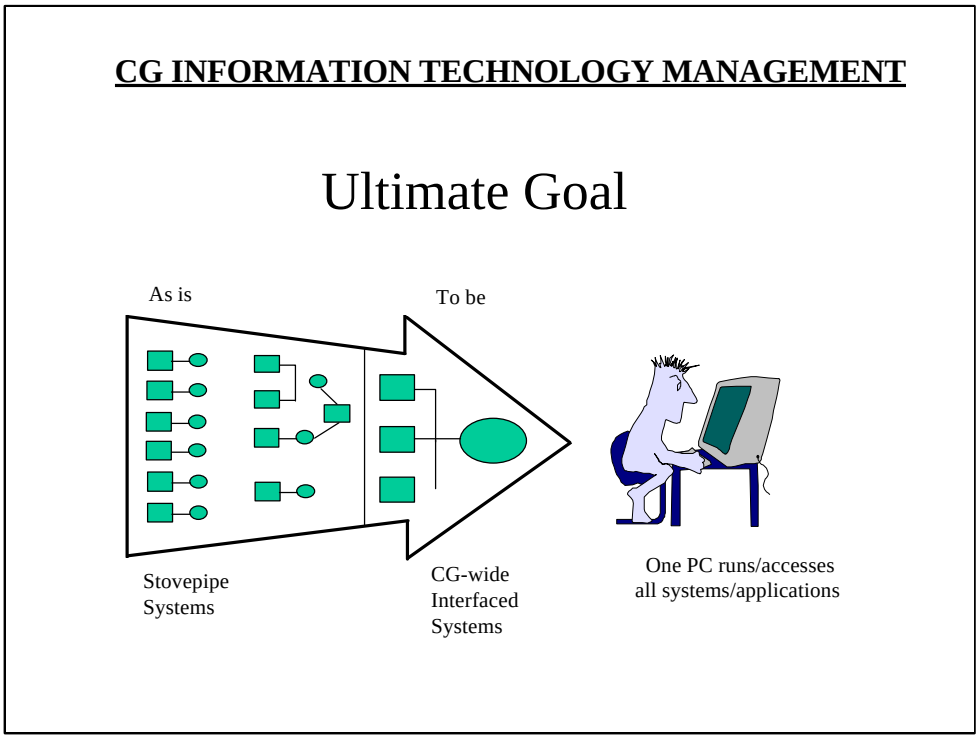
### Systems Evaluation

The Coast Guard is actively pursuing a replacement process consistent with Information Technology Reform which will comply with Executive Order 13011, the Clinger-Cohen Act of 1996, and other Federal regulations.

Specifically, the Coast Guard is defining processes to incorporate performance-based and results-based management in all IT programs; and a systems life cycle evaluation process to evaluate major IT investments as well as operational systems.

## IT Architecture

### *The Ultimate Goal*




The ultimate goal of Coast Guard-wide IT management is to maximize the use of IT investments and integrate all of our Coast Guard systems, tactical/non-tactical, classified/unclassified, business/operational, etc., to allow single desktop PC access. Any user anywhere can access the information they need to do their job from a single terminal.

To do this existing stovepipe systems must be redesigned to allow integrated and shared access. Information must be viewed and managed as a corporate resource just like people and dollars, and a centralized web based architecture and robust infrastructure must be in place. Developing Coast Guard Intranet applications running on SWIII equipment across the CGDN+ network accessing data stored throughout the Coast Guard is the basis of our centralized web based architecture. The real challenge to achieve this goal is to make the commitment to change our culture, organization and processes to begin to manage all IT resources as Coast Guard-wide investments.

## 6. LINKING IT PLANNING AND BUDGETING PROCESS.

### AGENCY-WIDE SUMMARY REPORT ON OBLIGATIONS FOR INFORMATION TECHNOLOGY

### DEPARTMENT OF TRANSPORTATION
### UNITED STATES COAST GUARD
### (in millions of dollars)

| | FY 1997 | FY 1998 | FY 1999 |
|---|---|---|---|
| 1. Equipment | | | |
| A. Capital purchases | 31.349 | 48.135 | 66.059 |
| B. Other equipment purchases/leases | 2.211 | 3.011 | 4.011 |
| Subtotal | 33.560 | 51.146 | 70.070 |
| | | | |
| 2. Software | | | |
| A. Capital purchases | 17.367 | 16.261 | 13.806 |
| B. Other software purchases/leases | .118 | 3.060 | 1.668 |
| Subtotal | 17.485 | 19.321 | 15.474 |
| | | | |
| 3. Services | 37.252 | 37.753 | 38.484 |
| | | | |
| 4. Support Services | 40.461 | 51.807 | 57.127 |
| | | | |
| 5. Supplies | 4.338 | 3.630 | 4.597 |
| | | | |
| 6. Personnel (compensation/benefits) | 13.529 | 13.818 | 15.300 |
| | | | |
| 7. Other (DOD only) | 0 | 0 | 0 |
| | | | |
| 8. Intra-government payments | 18.994 | 16.556 | 12.668 |
| | | | |
| 9. Intra-government collections | 0 | 0 | 0 |
| | | | |
| 10. Total obligations | 165.619 | 194.031 | 213.720 |
| | | | |
| 11. Workyears (FTE) | 261 | 263 | 285 |

## AGENCY-WIDE SUMMARY REPORT ON OBLIGATIONS FOR INFORMATION TECHNOLOGY

## DEPARTMENT OF TRANSPORTATION
## UNITED STATES COAST GUARD
## YEAR 2000 CONVERSION COSTS
## (in millions of dollars)

| | FY 1996 | FY 1997 | FY 1998 | FY 1999 | FY 2000 |
|---|---|---|---|---|---|
| 1. Equipment | | | | | |
| A. Capital purchases | 0 | 0 | 0 | 0 | 0 |
| B. Other equipment purchases/leases | 0 | 0 | 0 | 0 | 0 |
| Subtotal | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 2. Software | | | | | |
| A. Capital purchases | 0 | 0 | 0 | 0 | 0 |
| B. Other software purchases/leases | 0 | 0 | 0 | 0 | 0 |
| Subtotal | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 3. Services | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 4. Support Services | .031 | 1.300 | 3.200 | 3.800 | .350 |
| | | | | | |
| 5. Supplies | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 6. Personnel (compensation/benefits) | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 7. Other (DOD only) | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 8. Intra-government payments | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 9. Intra-government collections | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| 10. Total obligations | .031 | 1.300 | 3.200 | 3.800 | .350 |
| | | | | | |
| 11. Workyears (FTE) | 0 | 0 | 0 | 0 | 0 |